

**LEGEND**

	EXISTING	PROPOSED
SANITARY SEWER MANHOLE	⊙	⊙
STORM SEWER MANHOLE	⊙	⊙
STORM SEWER AREA DRAIN	—	—
STORM SEWER INLET (ROUND CASTING)	○	●
STORM SEWER INLET (RECTANGULAR CASTING)	□	■
PRECAST FLARED END SECTION	△	▲
CONCRETE HEADWALL	∩	∩
VALVE VAULT	⊙	⊙
VALVE BOX	■	■
FIRE HYDRANT	⊙	⊙
BUFFALO BOX	⊙	⊙
CLEANOUT	⊙	⊙
SANITARY SEWER	—	—
FORCE MAIN	—	—
STORM SEWER	—	—
DRAIN TILE	—	—
WATER MAIN	—	—
UTILITY CROSSING	—	—
LIGHTING	⊙	⊙
ELECTRICAL CABLE	—	—
OVERHEAD WIRES	—	—
CAUTION EXISTING UTILITIES NEARBY	—	⚠
ELECTRICAL TRANSFORMER OR PEDESTAL	⊙	⊙
POWER POLE	⊙	⊙
POWER POLE WITH LIGHT	⊙	⊙
STREET SIGN	⊙	⊙
GAS MAIN	—	—
TELEPHONE LINE	—	—
CONTOUR	749	749
SPOT ELEVATION	X(750.00)	X(750.00)
WETLANDS	—	—
FLOODWAY	—	—
FLOODPLAIN	—	—
HIGH WATER LEVEL (HWL)	—	—
NORMAL WATER LEVEL (NWL)	—	—
DIRECTION OF SURFACE FLOW	→	→
DITCH OR SWALE	—	—
DIVERSION SWALE	—	—
OVERFLOW RELIEF ROUTING	→	→
TREE WITH TRUNK SIZE	⊙	⊙
SOIL BORING	⊙	⊙
TOPSOIL PROBE	⊙	⊙
FENCE LINE, TEMPORARY SILT	—	—
FENCE LINE, WIRE	—	—
FENCE LINE, CHAIN LINK OR IRON	—	—
FENCE LINE, WOOD OR PLASTIC	—	—
CONCRETE SIDEWALK	—	—
CURB AND GUTTER	—	—
DEPRESSED CURB	—	—
REVERSE PITCH CURB & GUTTER	—	—
EASEMENT LINE	—	—

**ABBREVIATIONS**

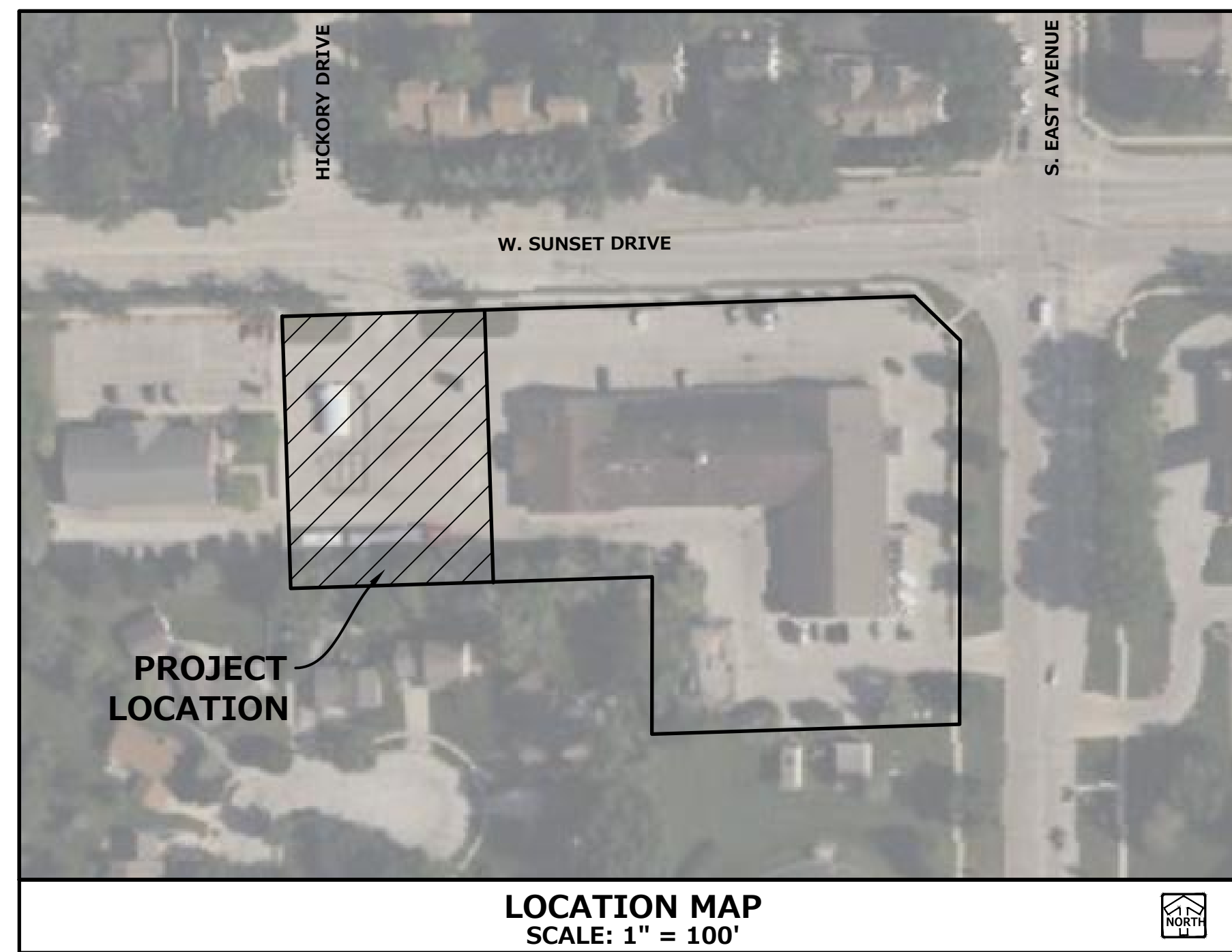
BL	BASE LINE	NWL	NORMAL WATER LEVEL
C	LONG CHORD OF CURVE	PC	POINT OF CURVATURE
C & G	CURB AND GUTTER	PT	POINT OF TANGENCY
CB	CATCH BASIN	PVI	POINT OF VERTICAL INTERSECTION
CL	CENTERLINE	R	RADIUS
D	DEGREE OF CURVE	ROW	RIGHT-OF-WAY
EP	EDGE OF PAVEMENT	SAN	SANITARY SEWER
FC	FACE OF CURB	ST	STORM SEWER
FF	FINISHED FLOOR	T	TANGENCY OF CURVE
FG	FINISHED GRADE	TB	TOP OF BANK
FL	FLOW LINE	TC	TOP OF CURB
FP	FLOODPLAIN	TF	TOP OF FOUNDATION
FR	FRAME	TP	TOP OF PIPE
FW	FLOODWAY	TS	TOP OF SIDEWALK
HWL	HIGH WATER LEVEL	TW	TOP OF WALK
INV	INVERT	WM	WATER MAIN
L	LENGTH OF CURVE	Δ	INTERSECTION ANGLE
MH	MANHOLE		
NTS	NOT TO SCALE		

ONSITE CIVIL ENGINEERING INFRASTRUCTURE PLANS  
FOR  
**NEW BUILDING FOR: STARBUCKS**

101 SUNSET DR. WAUKESHA, WI 53186

PLANS PREPARED FOR

LOGIC DESIGN & ARCHITECTURE, INC.



**GENERAL NOTES**

- THE INTENTION OF THE PLANS AND SPECIFICATIONS IS TO SET FORTH PERFORMANCE AND CONSTRUCTION MATERIAL STANDARDS FOR THE PROPER EXECUTION OF WORK. ALL WORKS CONTAINED WITHIN THE PLANS AND SPECIFICATIONS SHALL BE COMPLETED IN ACCORDANCE WITH ALL REQUIREMENTS FROM LOCAL, STATE, FEDERAL OR OTHER GOVERNING AGENCY'S LAWS, REGULATIONS, JURISDICTIONAL ORDINANCES/CODES/RULES/ETC., AND THE OWNER'S DIRECTION.
- THE CONTRACTOR IS RESPONSIBLE TO REVIEW AND UNDERSTAND ALL COMPONENTS OF THE PLANS AND SPECIFICATIONS, INCLUDING FIELD VERIFYING SOIL CONDITIONS, PRIOR TO SUBMISSION OF A BID PROPOSAL.
- THE CONTRACTOR SHALL PROMPTLY REPORT ANY ERRORS OR AMBIGUITIES LEARNED AS PART OF THEIR REVIEW OF PLANS, SPECIFICATIONS, REPORTS AND FIELD INVESTIGATIONS.
- THE CONTRACTOR IS SOLELY RESPONSIBLE FOR THE COMPUTATION OF QUANTITIES AND WORK REQUIRED TO COMPLETE THIS PROJECT. THE CONTRACTOR'S BID SHALL BE BASED ON ITS OWN COMPUTATIONS AND IN NO SUCH INSTANCE RELY ON THE ENGINEER'S ESTIMATE.
- QUESTIONS/CLARIFICATIONS WILL BE INTERPRETED BY ENGINEER/OWNER PRIOR TO THE AWARD OF CONTRACT. ENGINEER/OWNER WILL SUBMIT OFFICIAL RESPONSES IN WRITING. INTERPRETATIONS PRESENTED IN OFFICIAL RESPONSES SHALL BE BINDING ON ALL PARTIES ASSOCIATED WITH THE CONTRACT. IN NO WAY SHALL WORD-OF-MOUTH DIALOG CONSTITUTE AN OFFICIAL RESPONSE.
- PRIOR TO START OF WORK, CONTRACTOR SHALL BE COMPLETELY FAMILIAR WITH ALL CONDITIONS OF THE SITE, AND SHALL ACCOUNT FOR CONDITIONS THAT AFFECT, OR MAY AFFECT CONSTRUCTION INCLUDING, BUT NOT LIMITED TO, LIMITATIONS OF WORK ACCESS, SPACE LIMITATIONS, OVERHEAD OBSTRUCTIONS, TRAFFIC PATTERNS, LOCAL REQUIREMENTS, ADJACENT ACTIVITIES, ETC. FAILURE TO CONSIDER SITE CONDITIONS SHALL NOT BE CAUSE FOR CLAIM OF JOB EXTRAS.
- COMMENCEMENT OF CONSTRUCTION SHALL EXPLICITLY CONFIRM THAT THE CONTRACTOR HAS REVIEWED THE PLANS AND SPECIFICATIONS IN ENTIRETY AND CERTIFIES THAT THEIR SUBMITTED BID PROPOSAL CONTAINS PROVISIONS TO COMPLETE THE PROJECT, WITH THE EXCEPTION OF UNFORESEEN FIELD CONDITIONS; ALL APPLICABLE PERMITS HAVE BEEN OBTAINED; AND CONTRACTOR UNDERSTANDS ALL OF THE REQUIREMENTS OF THE PROJECT.
- SHOULD ANY DISCREPANCIES OR CONFLICTS IN THE PLANS OR SPECIFICATIONS BE DISCOVERED AFTER THE AWARD OF CONTRACT, ENGINEER SHALL BE NOTIFIED IN WRITING IMMEDIATELY AND CONSTRUCTION OF ITEMS AFFECTED BY THE DISCREPANCIES/CONFLICTS SHALL NOT COMMENCE, OR CONTINUE, UNTIL A WRITTEN RESPONSE FROM ENGINEER/OWNER IS DISTRIBUTED. IN THE EVENT OF A CONFLICT BETWEEN REFERENCED CODES, STANDARDS, SPECIFICATIONS AND PLANS, THE ONE ESTABLISHING THE MOST STRINGENT REQUIREMENTS SHALL BE FOLLOWED.
- THE CONTRACTOR SHALL, AT ITS OWN EXPENSE, OBTAIN ALL NECESSARY PERMITS AND LICENSES TO COMPLETE THE PROJECT. OBTAINING PERMITS, OR DELAYS, IS NOT CAUSE FOR DELAY OF THE CONTRACT OR SCHEDULE. CONTRACTOR SHALL COMPLY WITH ALL PERMIT REQUIREMENTS.
- THE CONTRACTOR SHALL NOTIFY ALL INTERESTED GOVERNING AGENCIES, UTILITY COMPANIES AFFECTED BY THIS CONSTRUCTION PROJECT, AND DIGGER'S HOTLINE IN ADVANCE OF CONSTRUCTION TO COMPLY WITH ALL JURISDICTIONAL ORDINANCES/CODES/RULES/ETC., PERMIT STIPULATIONS, AND OTHER APPLICABLE STANDARDS.
- SAFETY IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR. THE CONTRACTOR SHALL BE RESPONSIBLE TO INITIATE, INSTITUTE, ENFORCE, MAINTAIN, AND SUPERVISE ALL SAFETY PRECAUTIONS AND JOB SITE SAFETY PROGRAMS IN CONNECTION WITH THE WORK.
- CONTRACTOR SHALL KEEP THE JOBSITE CLEAN AND ORDERLY AT ALL TIMES. ALL LOCATIONS OF THE SITE SHALL BE KEPT IN A WORKING MANNER SUCH THAT DEBRIS IS REMOVED CONTINUOUSLY AND ALL RESPECTIVE CONTRACTORS OPERATE UNDER GENERAL 'GOOD HOUSEKEEPING.'
- THE CONTRACTOR SHALL INDEMNIFY THE OWNER, ENGINEER, AND THEIR AGENTS FROM ALL LIABILITY INVOLVED WITH THE CONSTRUCTION, INSTALLATION, AND TESTING OF THE WORK ON THIS PROJECT.
- ALL SITE IMPROVEMENTS AND CONSTRUCTION SHOWN ON THE PLANS SHALL CONFORM TO THE CITY OF WAUKESHA DEVELOPMENT HANDBOOK & INFRASTRUCTURE SPECIFICATIONS. WHERE THE PLANS DO NOT COMPLY, IT SHALL BE THE SOLE RESPONSIBILITY AND EXPENSE OF THE DEVELOPER TO MAKE REVISIONS TO THE PLANS AND/OR CONSTRUCTED INFRASTRUCTURE TO COMPLY."

**INDEX OF SHEETS**

C-1	COVER SHEET
C-2	GENERAL NOTES
C-3	EXISTING CONDITIONS & DEMO PLAN
C-4	SITE DIMENSIONAL & PAVING PLAN
C-5	GRADING & EROSION CONTROL PLAN
C-6	SPOT GRADE PLAN
C-7	STORM SEWER PLAN
C-8	SANITARY & WATERMAIN PLAN
C-9	CONSTRUCTION DETAILS
C-10-C-11	CONSTRUCTION DETAILS
C-12	SITE ACCESS SEQUENCING PLAN
L-1	OVERALL LANDSCAPE PLAN
L-2	LANDSCAPE GENERAL NOTES
L-3	LANDSCAPE DETAILS

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**BENCHMARKS**

**VERTICAL DATUM:** NGVD29  
**REF BM:** Reference Benchmark: South Witness Monument with Brass Cap for the Northeast Corner of the Northeast 1/4 Section 15, Town 6 North, Range 19 East, Elevation = 880.65



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**PINNACLE ENGINEERING GROUP, LLC**  
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FURTHERMORE, PINNACLE ENGINEERING GROUP, LLC IS NOT RESPONSIBLE FOR CONSTRUCTION SAFETY OR THE MEANS AND METHODS OF CONSTRUCTION.

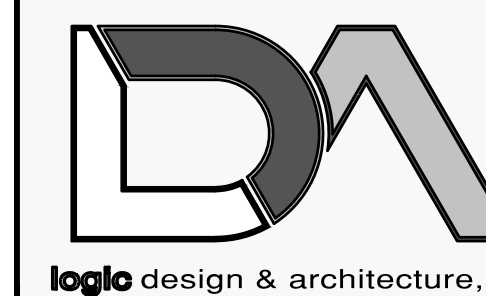
**PINNACLE ENGINEERING GROUP**

ENGINEERING | NATURAL RESOURCES | SURVEYING  
PLAN | DESIGN | DELIVER

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CHICAGO | MILWAUKEE | NATIONWIDE  
PEG JOB #: 6075.00-WI

COVER SHEET  
N.T.S.



LogicDA.com | 414.909.0080

Project Manager: AEV  
Job Number: 24-092

Additional Info

Project Name

NEW BUILDING FOR:  
STARBUCKS

101 SUNSET DR.  
WAUKESHA, WI 53186

Dates/Revisions

01/24/2025	FINAL PLAN	△
02/17/2025	COMMISSION PERMIT SET	△

Drawing Title

COVER SHEET

C-1

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PRELIMINARY - NOT FOR CONSTRUCTION

**GENERAL SPECIFICATIONS FOR CONSTRUCTION ACTIVITIES**

- THE PROPOSED IMPROVEMENTS SHALL BE CONSTRUCTED ACCORDING TO THE WISCONSIN D.O.T. STANDARD SPECIFICATIONS FOR HIGHWAY AND STRUCTURE CONSTRUCTION, LATEST EDITION, THE STANDARD SPECIFICATIONS FOR SEWER & WATER IN WISCONSIN, AND WISCONSIN ADMINISTRATIVE CODE, SPS 360, 382-383, AND THE LOCAL ORDINANCES AND SPECIFICATIONS.
- THE CONTRACTOR SHALL OBTAIN ALL PERMITS REQUIRED FOR EXECUTION OF THE WORK. THE CONTRACTOR SHALL CONDUCT THEIR WORK ACCORDING TO THE REQUIREMENTS OF THE PERMITS.
- THE CONTRACTOR SHALL NOTIFY THE OWNER AND THE MUNICIPALITY FORTY- EIGHT (48) HOURS PRIOR TO THE START OF CONSTRUCTION.
- THE CONTRACTOR SHALL NOTIFY OWNERS OF BUSINESSES UTILIZING THE PROPOSED LOT 1 FOR SITE ACCESS PRIOR TO COMMENCEMENT OF WORK.
- THE MUNICIPALITY SHALL HAVE THE RIGHT TO INSPECT, APPROVE, AND REJECT THE CONSTRUCTION OF THE PUBLIC PORTIONS OF THE WORK. THE OWNER SHALL HAVE THE RIGHT TO INSPECT, APPROVE, AND REJECT THE CONSTRUCTION OF ALL PRIVATE PORTIONS OF THE WORK.
- THE CONTRACTOR SHALL INDEMNIFY THE OWNER, THE ENGINEER, AND THE MUNICIPALITY, THEIR AGENTS, ETC, FROM ALL LIABILITY INVOLVED WITH THE CONSTRUCTION, INSTALLATION, AND TESTING OF THE WORK ON THIS PROJECT.
- THE SITE SAFETY SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR.
- THE CONTRACTOR IS RESPONSIBLE FOR FIELD VERIFYING ALL UTILITY INFORMATION SHOWN ON THE PLANS PRIOR TO THE START OF CONSTRUCTION. THE CONTRACTOR SHALL CALL DIGGERS HOTLINE AT 1-800-242-8511 TO NOTIFY THE UTILITIES OF HIS INTENTIONS, AND TO REQUEST FIELD STAKING OF EXISTING UTILITIES.
- SILT FENCE AND OTHER EROSION CONTROL FACILITIES MUST BE INSTALLED PRIOR TO CONSTRUCTION OR ANY OTHER LAND DISTURBING ACTIVITY. FOLLOW THE SEQUENCE OF CONSTRUCTION ON THE GRADING & EROSION CONTROL PLAN FOR MORE DETAILS. INSPECTIONS SHALL BE MADE WEEKLY OR AFTER EVERY RAINFALL OF 0.5" OR MORE. REPAIRS SHALL BE MADE IMMEDIATELY. THE CONTRACTOR SHALL BE RESPONSIBLE FOR REMOVING ALL EROSION CONTROL FACILITIES ONCE THE THREAT OF EROSION HAS PASSED WITH THE APPROVAL OF THE GOVERNING AGENCY.
- ANY ADJACENT PROPERTIES OR ROAD RIGHT-OF-WAYS WHICH ARE DAMAGED DURING CONSTRUCTION MUST BE RESTORED BY THE CONTRACTOR.
- TRASH AND DEBRIS SHALL BE NOT BE ALLOWED TO ACCUMULATE ON THIS SITE AND THE SITE SHALL BE CLEAN UPON COMPLETION OF WORK.
- THE OWNER SHALL HAVE THE RIGHT TO HAVE ALL MATERIALS USED IN CONSTRUCTION TESTED FOR COMPLIANCE WITH THESE SPECIFICATIONS.
- SPOT ELEVATIONS REPRESENT THE GRADE ON PAVEMENT SURFACE OR FLOW LINE UNLESS OTHERWISE NOTED.
- THE CONTRACTOR SHALL IMMEDIATELY NOTIFY ENGINEER/OWNER IF GROUNDWATER IS ENCOUNTERED DURING EXCAVATION.
- THE CONTRACTOR SHALL NOTIFY CITY OF WAUKESHA ENGINEERING DEPARTMENT FIVE DAYS PRIOR TO WORK IN CITY RIGHT OF WAY. WORK WITHIN ANY ROADWAY RIGHT-OF-WAY SHALL BE COORDINATED WITH THE CITY OF WAUKESHA PRIOR TO COMMENCEMENT OF ANY CONSTRUCTION ACTIVITIES. CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND FEES. GRADING WITHIN RIGHT-OF-WAY IS SUBJECT TO APPROVAL BY SAID OFFICIALS. RESTORATION OF RIGHT-OF-WAY IS CONSIDERED INCIDENTAL AND SHALL BE INCLUDED IN THE COST OF GRADING. RESTORATION SHALL INCLUDE ALL ITEMS NECESSARY TO RESTORE RIGHT-OF-WAY IN-KIND INCLUDING LANDSCAPING.
- CONTRACTOR SHALL COMPLY WITH ALL CITY OF WAUKESHA CONSTRUCTION STANDARDS/ORDINANCES.
- LANDSCAPE AND TURF AREAS SHALL HAVE A MINIMUM OF 4-INCH TOPSOIL REPLACEMENT.

**SPECIFICATIONS FOR GRADING & EROSION CONTROL**

- THE CONTRACTOR SHALL ASSUME SOLE RESPONSIBILITY FOR THE COMPUTATIONS OF ALL GRADING AND FOR ACTUAL LAND BALANCE, INCLUDING UTILITY TRENCH SPOIL. THE CONTRACTOR SHALL IMPORT OR EXPORT MATERIAL AS NECESSARY TO COMPLETE THE PROJECT. CONTRACTOR SHALL NOTIFY OWNER OF THE NEED TO IMPORT OR HAUL OFF SOIL. ON-SITE LOCATIONS SUITABLE FOR BORROW OR FILL MAY BE PRESENT. COORDINATE WITH OWNER.
- THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING SOIL CONDITIONS PRIOR TO COMMENCEMENT OF CONSTRUCTION. A GEOTECHNICAL REPORT MAY BE AVAILABLE FROM THE OWNER.
- SITE SHALL BE CLEARED TO THE LIMITS SHOWN ON THE PLANS. REMOVE VEGETATION FROM THE SITE. BURNING IS NOT PERMITTED. PROTECT TREES AND OTHER FEATURES FROM DAMAGE WITH FENCING. STOCKPILES SHALL NOT BE LOCATED CLOSER THAN 25' TO A DRAINAGE STRUCTURE OR FEATURE AND SHALL BE SURROUNDED WITH SILT FENCE.
- THE GEOTECHNICAL ENGINEER IS RESPONSIBLE FOR VERIFYING COMPACTION AND FILL PLACEMENT IN THE FIELD. THE GEOTECHNICAL ENGINEER MAY SUPERCEDE THESE SPECIFICATIONS IF THERE IS GOOD CAUSE TO DO SO. AN EXPLANATION MUST BE SUBMITTED TO THE ENGINEER IN WRITING BEFORE ANY DEVIATIONS ARE MADE.
- IF NO GEOTECHNICAL RECOMMENDATION IS AVAILABLE, THEN THE FOLLOWING SPECIFICATIONS SHALL APPLY. ALL FILL SHALL BE CONSIDERED STRUCTURAL FILL AND SHALL BE PLACED IN ACCORDANCE WITH THE FOLLOWING: THE COMPACTED FILL SUBGRADE SHALL CONSIST OF AND SHALL BE UNDERLAIN BY SUITABLE BEARING MATERIALS, FREE OF ALL ORGANIC, FROZEN OR OTHER DELETERIOUS MATERIAL AND INSPECTED AND APPROVED BY THE RESIDENT GEOTECHNICAL ENGINEER. PREPARATION OF THE SUBGRADE, AFTER STRIPPING, SHALL CONSIST OF PROOF-ROLLING TO DETECT UNSTABLE AREAS THAT MIGHT BE UNDERCUT, AND COMPACTING THE SCARIFIED SURFACE TO THE SAME MINIMUM DENSITY INDICATED BY THE CONTRACTOR. ALL MATERIALS SHALL BE FREE OF ANY DELETERIOUS, ORGANIC OR FROZEN MATTER AND SHALL HAVE A MAXIMUM LIQUID LIMIT (ASTM D-423) AND PLASTICITY INDEX (ASTM D-424) IF 30 AND 10 RESPECTIVELY, UNLESS SPECIFICALLY TESTED AND FOUND TO HAVE LOW EXPANSIVE PROPERTIES AND APPROVED BY AN EXPERIENCED SOILS ENGINEER. THE TOP TWO (2") INCHES OF COMPACTED FILL SHOULD HAVE A MAXIMUM THREE (3") INCH PARTICLE DIAMETER AND ALL UNDERLYING COMPACTED FILL A MAXIMUM SIX (6") INCH PARTICLE DIAMETER UNLESS SPECIFICALLY APPROVED BY AN EXPERIENCED SOILS ENGINEER. ALL FILL MATERIAL MUST BE TESTED AND APPROVED UNDER THE DIRECTION AND SUPERVISION OF AN EXPERIENCED SOILS ENGINEER PRIOR TO PLACEMENT. IF THE FILL IS TO PROVIDE NON-FROST SUSCEPTIBLE CHARACTERISTICS, IT MUST BE CLASSIFIED AS A CLEAN GW, GP, SW, OR SP PER UNITED SOIL CLASSIFICATION SYSTEM (ASTM D-2487), FOR STRUCTURAL FILL THE DENSITY OF THE STRUCTURAL COMPACTED FILL AND SCARIFIED SUBGRADE AND GRADES SHALL NOT BE LESS THAN 95 PERCENT OF THE MAXIMUM DRY DENSITY AS DETERMINED BY THE STANDARD PROCTOR (ASTM D-698) WITH THE EXCEPTION TO THE TOP 12 INCHES OF PAVEMENT SUBGRADE WHICH SHALL A MINIMUM IN-SITU DENSITY OF 100 PERCENT OF THE MAXIMUM DRY DENSITY, OR 5 PERCENT HIGHER THAN UNDERLYING FILL MATERIALS. THE MOISTURE CONTENT OF COHESIVE SOIL SHALL NOT VARY BY MORE THAN -1 TO +3 PERCENT AND GRANULAR SOIL 23 PERCENT OF OPTIMUM WHEN PLACED AND COMPACTED OR RECOMPACTED, UNLESS SPECIFICALLY APPROVED BY THE SOILS ENGINEER TAKING INTO CONSIDERATION THE TYPE OF MATERIALS AND COMPACTION EQUIPMENT BEING USED. THE COMPACTION EQUIPMENT SHOULD CONSIST OF SUITABLE MECHANICAL EQUIPMENT SPECIFICALLY DESIGNED FOR SOIL COMPACTION. BULLDOZERS OR SIMILAR TRACKED VEHICLES ARE TYPICALLY NOT SUITABLE FOR COMPACTION. MATERIAL THAT IS TOO WET TO PERMIT PROPER COMPACTION MAY BE SPREAD ON THE FILL AND PERMITTED TO DRY. DISCING, HARROWING OR PULVERIZING MAY BE NECESSARY TO REDUCE THE MOISTURE CONTENT TO A SATISFACTORY VALUE, AFTER WHICH IT SHALL BE COMPACTED. THE FINISHED SUBGRADE AREAS OF THE SITE SHALL BE COMPACTED TO 100 PERCENT OF THE STANDARD PROCTOR (ASTM D-398) MAXIMUM DENSITY.
- NO FILL SHALL BE PLACED ON A WET OR SOFT SUBGRADE. THE SUBGRADE SHALL BE PROOF-ROLLED AND INSPECTED BY THE GEOTECHNICAL ENGINEER BEFORE ANY MATERIAL IS PLACED.
- SUBGRADE TOLERANCES ARE +/-1" FOR LANDSCAPE AREAS AND +/- 1/2" FOR ALL PAVEMENT AND BUILDING AREAS.
- TOPSOIL SHALL BE FREE OF DELETERIOUS MATERIALS, ROOTS, OLD VEGETATION, ROCKS OVER 2" DIAMETER AND SHALL NOT BE EXCESSIVELY CLAYEY IN NATURE. NO CLUMPS LARGER THAN 4" ARE ACCEPTABLE. TOPSOIL MAY BE AMENDED AS NEEDED WITH SAND OR COMPOST TO BE LOOSE WHEN SPREAD.
- THE CONTRACTOR SHALL MAINTAIN SITE DRAINAGE THROUGHOUT CONSTRUCTION. THIS MAY INCLUDE THE EXCAVATION OF TEMPORARY DITCHES OR PUMPING TO ALLEVIATE WATER PONDING. ANY DEWATERING SHALL NOT GO DIRECTLY TO STREAMS, CREEKS, WETLANDS OR OTHER ENVIRONMENTALLY SENSITIVE AREAS WITHOUT BEING TREATED FIRST. A DIRT BAG OR OTHER DEWATERING TREATMENT DEVICE MAY BE USED TO CAPTURE SEDIMENT FROM THE PUMPED WATER.
- CONTRACTOR IS ADVISED THAT ALL MUD AND DEBRIS MUST NOT BE DEPOSITED ONTO THE ADJACENT ROADWAYS PER THE REQUIREMENT OF THE MUNICIPALITY OR OTHER APPROPRIATE GOVERNMENT AGENCIES. IN THE EVENT THIS OCCURS, THE ROADWAYS SHALL BE POWER SWEEP IMMEDIATELY AND ALL SEDIMENT REMOVED FROM DOWNSTREAM FACILITIES.

**SPECIFICATIONS FOR PRIVATE UTILITIES**

- BEFORE PROCEEDING WITH ANY UTILITY CONSTRUCTION, THE CONTRACTOR SHALL EXCAVATE EACH EXISTING LATERAL OR POINT OF CONNECTION AND VERIFY THE LOCATION AND ELEVATION OF ALL UTILITIES. IF ANY EXISTING UTILITIES ARE NOT AS SHOWN ON THE DRAWINGS, THE CONTRACTOR SHALL NOTIFY THE ENGINEER IMMEDIATELY FOR POSSIBLE REVISION.
- ALL CONNECTIONS TO EXISTING PIPES AND MANHOLES SHALL BE CORED CONNECTIONS. CONNECTIONS TO WATERMAIN SHALL BE WET TAPED WITH A STAINLESS STEEP TAPPING SLEEVE.
- PROPOSED SANITARY SEWER AND INTERNALLY CONNECTED STORM SEWER SHOWN ON THIS PLAN SHALL TERMINATE AT A POINT FIVE (5) FEET FROM THE EXTERIOR BUILDING WALL. THE EXACT LOCATION OF ALL DOWN SPOUTS CONNECTIONS SHALL BE PER THE ARCHITECTURAL PLANS.
- CONTRACTOR SHALL NOT SHUT OFF WATER OR PLUG SANITARY SEWER IN MUNICIPAL LINES WITHOUT PRIOR APPROVAL.
- MATERIALS FOR STORM SEWER SHALL BE AS FOLLOWS: STORM SEWER PIPE 48" OR LESS SHALL BE HIGH DENSITY POLYETHYLENE (HDPE) CORRUGATED PIPE WITH AN INTEGRALLY FORMED SMOOTH WATERWAY SUCH AS ADS N-12 FOR PIPE 10" OR LESS IN DIAMETER. PVC, ASTM D-3034, MAY ALSO BE USED, WHERE SPECIFICALLY REQUIRED. REINFORCED CONCRETE PIPE (RCP), ASTM C-76, CLASS III OR HIGHER, MAY BE USED. TRENCH SECTION SHALL BE CLASS "B" FOR PVC AND HDPE AND CLASS "C" FOR CONCRETE (PER STANDARD SPECIFICATIONS). MANHOLES, INLETS AND CATCH BASINS SHALL BE PRE CAST REINFORCED CONCRETE, ASTM C-478. CASTINGS SHALL BE HEAVY DUTY CAST IRON. AREA DRAINS SHALL BE PER DETAIL ON PLAN OR EQUIVALENT AND SHALL BE A MINIMUM OF 24" IN DIAMETER. CONNECTIONS TO EXISTING PIPES SHALL BE MADE WITH INSERTA WYE OR EQUIVALENT. LAST (3) THREE JOINTS SHALL BE RESTRAINED WITH RODS.
- MATERIALS FOR SANITARY SEWER SHALL BE AS FOLLOWS: SANITARY SEWER SHALL BE PVC, ASTM D-3034, SDR-35 WITH RUBBER GASKETED JOINTS, CONFORMING TO ASTM D.3212. TRENCH SECTIONS SHALL BE CLASS "B" BEDDING (PER STANDARD SPECIFICATIONS). CRUSHED STONE CHIPS SHALL BE USED FOR BEDDING MATERIAL. CONNECTIONS SHALL BE MAD WITH A INSERTA WYE OR EQUIVALENT. A MINIMUM OF 6" OF COVER IS REQUIRED FOR ALL SANITARY SEWER.
- MATERIALS FOR WATER SERVICES AND PRIVATE HYDRANTS SHALL BE AS FOLLOWS: WATER SERVICES SHALL BE PVC, HDPE, OR DI AS ALLOWED BY MUNICIPAL CODE. PVC SHALL BE AWWA C151, CLASS S2 (OR AS REQUIRED BY LOCAL CODE). TRENCH SECTIONS SHALL BE CLASS "B" BEDDING (PER STANDARD SPECIFICATIONS). CRUSHED STONE CHIPS SHALL BE USED FOR BEDDING MATERIAL. CONNECTION SHALL BE MADE WITH A WET TAP, CORPORATE STOP AND VALVE BOX PER MUNICIPAL STANDARDS. A MINIMUM OF 6" COVER IS REQUIRED FOR ALL WATERMAIN. VALVES SHALL BE NONRISING STEM, RESILIANT SEATED GATE VALVES COMPLYING WITH AWWA C509 WITH A THREE PIECE CAST IRON VALVE BOX. INSTALL THRUST BLOCKS AT ALL BENDS AND TEES. DISINFECT ALL NEW LINES AND OBTAIN SAFE WATER SAMPLE PRIOR TO USE.
- EXTREME CAUTION MUST BE FOLLOWED REGARDING THE COMPACTION OF ALL UTILITY TRENCHES. MECHANICALLY COMPACTED GRANULAR BACKFILL IS REQUIRED UNDER & WITHIN 5 FEET OF ALL PAVEMENT INCLUDING SIDEWALKS. FLOODING OF BACKFILL MATERIAL IS NOT ALLOWED.
- TRACER WIRE (NO. 12 SINGLE STRAND COPPER) AND WARNING TAPE SHALL BE INSTALLED ON ALL UTILITIES IN ACCORDANCE WITH THE LOCAL AND STATE CODES. TRACER WIRE SHALL TERMINATE IN A VALVECO TERMINAL BOX AT EACH END.
- MANDREL TESTING ON SANITARY LINES AND PRESSURE TESTING ON WATERMAIN MAY BE REQUIRED BY THE OWNER OR MUNICIPALITY.
- UPON COMPLETION OF FINAL PAVING OPERATIONS, THE UTILITY CONTRACTOR SHALL ADJUST ALL MANHOLE AND INLET RIMS AND VALVE BOXES TO FINISHED GRADE.
- 45° BENDS SHALL BE USED IN PLACE OF 90° BENDS WHEREVER POSSIBLE

**SPECIFICATIONS FOR PAVING**

- ALL DIMENSIONS ARE TO FACE OF CURB OR FACE OF BUILDING UNLESS NOTED OTHERWISE. ALL UTILITY DIMENSIONS ARE TO OUTSIDE OF PIPE OR CENTER OF STRUCTURE UNLESS OTHERWISE NOTED. ALL PAVING DIMENSIONS ARE TO FACE OF CURB OR TO EDGE OF PAVEMENT, EXCEPT FOR THE SETBACK FROM PARKING LOTS, MANUEVERING LANES AND FIRE ACCESS LANES, WHERE THE SETBACK IS MEASURED FROM THE BACK OF CURB TO THE PROPERTY LINE.
- AGGREGATES USED IN THE CRUSHED STONE BASE SHALL CONFORM TO THE GRADATION REQUIREMENTS SECTIONS 301.2 AND 305.2.2 OF THE STANDARD SPECIFICATIONS. THICKNESS SHALL BE PER THE DETAIL ON THE PLANS. BASE SHALL BE 1 1/2 INCH DIAMETER LIMESTONE UNLESS NOTED OTHERWISE. RECYCLED MATERIALS MAY BE ALLOWED WITH APPROVAL FROM THE OWNER.
- SUBGRADE SHALL BE PROOFROLLED AND APPROVED BY A GEOTECHNICAL ENGINEER PRIOR TO PLACEMENT OF STONE BASE. EXCAVATE UNSUITABLE AREAS AND REPLACE WITH BREAKER RUN STONE AND RECOMPACT. REFER TO THE GEOTECHNICAL REPORT FOR ADDITIONAL SPECIFICATIONS.
- EXISTING PAVEMENT SHALL BE SAWCUT IN NEAT STRAIGHT LINES TO FULL DEPTH AT ANY POINT WHERE EXISTING PAVEMENT IS REMOVED. CURB AND WALK SHALL BE REMOVED TO THE NEAREST JOINT. REMOVED PAVEMENT SHALL BE REPLACED WITH THE SAME SECTION AS EXISTING. MUNICIPAL STANDARDS MAY REQUIRE ADDITIONAL WORK.
- ASPHALT FOR PARKING AREAS AND THE PRIVATE ROAD SHALL BE PER THE DETAILS. MATERIALS AND PLACEMENT SHALL CONFORM TO THE DOT STANDARD SPECIFICATIONS, SECTION 450 AND 460 TYPE LT IS REQUIRED UNLESS NOTED OTHERWISE. A COMMERCIAL GRADE MIX MAY BE SUBSTITUTED ONLY WITH APPROVAL FROM THE OWNER.
- CONCRETE FOR CURB, DRIVEWAY, WALKS AND NON-FLOOR SLABS SHALL CONFORM TO THE SECTION 415 OF THE STANDARD SPECIFICATIONS. GRADE A, ASTM C-94, 6 BAG MIX, WITH A MINIMUM 28 DAY COMPRESSIVE STRENGTH OF 3,500 PSI. JOINTING SHALL BE PER SECTION 415.3.7 OF THE STANDARD SPECIFICATION WITH CONSTRUCTION JOINTS HAVING A MAXIMUM SPACING OF 10'. EXPANSION JOINTS SHALL BE PROVIDED EVERY 50'. CONCRETE SHALL BE FINISHED PER SECTION 415.3.8 WITH A MEDIUM BROOM TEXTURE. A CURING MEMBRANE IN CONFORMANCE WITH SECTION 415.3.12 IS REQUIRED.
- PROVIDE CONTRACTOR GRADE ACRYLIC, STRIPING PAINT FOR NEW ASPHALT OR COATED ASPHALT. APPLY MARKING PAINT AT A RATE OF ONE (1) GALLON PER THREE TO FOUR HUNDRED (300-400) LINEAL FEET OF FOUR (4) INCH WIDE STRIPES OR TO MANUFACTURER'S SPECIFICATION, WHICHEVER IS GREATER.
- THOROUGHLY CLEAN SURFACES FREE OF DIRT, SAND, GRAVEL, OIL AND OTHER FOREIGN MATTER. CONTRACTOR RESPONSIBLE TO INSPECT EXISTING PAVEMENT SURFACES FOR CONDITIONS AND DEFECTS THAT WILL ADVERSELY AFFECT QUALITY OF WORK, AND WHICH CANNOT BE PUT INTO AN ACCEPTABLE CONDITION THROUGH NORMAL PREPARATORY WORK AS SPECIFIED.

**GENERAL EROSION AND SEDIMENT CONTROL NOTES**

- ALL CONSTRUCTION SHALL ADHERE TO THE REQUIREMENTS SET FORTH IN EPA'S NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) STORMWATER GENERAL PERMIT FOR CONSTRUCTION SITE LAND DISTURBANCE ACTIVITIES. ALL EROSION AND SEDIMENT CONTROL MEASURES ARE TO BE CONSTRUCTED AND MAINTAINED IN ACCORDANCE WITH LOCAL, STATE AND FEDERAL TECHNICAL STANDARDS AND PROVISIONS IN EFFECT AT THE TIME OF CONSTRUCTION. THESE PROCEDURES AND STANDARDS SHALL BE REFERRED TO AS BEST MANAGEMENT PRACTICES (BMPs). IT IS THE RESPONSIBILITY OF ALL CONTRACTORS ASSOCIATED WITH THE PROJECT TO OBTAIN A COPY OF, AND UNDERSTAND, THE BMPs PRIOR TO THE START OF CONSTRUCTION ACTIVITIES.
- THE EROSION CONTROL MEASURES INDICATED ON THE PLANS ARE THE MINIMUM REQUIREMENTS. ADDITIONAL CONTROL MEASURES AS DIRECTED BY OWNER/ENGINEER OR GOVERNING AGENCIES SHALL BE INSTALLED WITHIN 24 HOURS OF REQUEST.
- MODIFICATIONS TO THE APPROVED SWPPP IN ORDER TO MEET UNFORESEEN FIELD CONDITIONS ARE ALLOWED IF MODIFICATIONS CONFORM TO BMPs. ALL MODIFICATIONS MUST BE APPROVED BY OWNER/ENGINEER/GOVERNING AGENCY PRIOR TO DEVIATION OF THE APPROVED PLAN.
- INSTALL PERIMETER EROSION CONTROL MEASURES (SUCH AS CONSTRUCTION ENTRANCES, SILT FENCE AND EXISTING INLET PROTECTION) PRIOR TO ANY SITE WORK, INCLUDING GRADING OR DISTURBANCE OF EXISTING SURFACE COVER, AS SHOWN ON PLAN IN ORDER TO PROTECT ADJACENT PROPERTIES/STORM SEWER SYSTEMS FROM SEDIMENT TRANSPORT.
- CONSTRUCTION ENTRANCES SHALL BE INSTALLED AT ALL LOCATIONS OF VEHICLE INGRESS/EGRESS POINTS. CONTRACTOR IS RESPONSIBLE TO COORDINATE LOCATION(S) WITH THE PROPER AUTHORITIES, PROVIDE NECESSARY FEES AND OBTAIN ALL REQUIRED APPROVALS OR PERMITS. ADDITIONAL CONSTRUCTION ENTRANCES OTHER THAN AS SHOWN ON THE PLANS MUST BE APPROVED BY THE APPLICABLE GOVERNING AGENCIES PRIOR TO INSTALLATION.
- PAVED SURFACES ADJACENT TO CONSTRUCTION ENTRANCES SHALL BE SWEEPED AND/OR SCRAPED TO REMOVE ACCUMULATED SOIL, DIRT AND/OR DUST IMMEDIATELY AND AS REQUESTED BY THE GOVERNING AGENCIES.
- ALL EXISTING STORM SEWER FACILITIES THAT WILL COLLECT RUNOFF FROM DISTURBED AREAS SHALL BE PROTECTED TO PREVENT SEDIMENT DEPOSITION WITHIN STORM SEWER SYSTEMS. INLET PROTECTION SHALL BE IMMEDIATELY FITTED AT THE INLET OF ALL INSTALLED STORM SEWER AND SILT FENCE SHALL BE IMMEDIATELY FITTED AT ALL INSTALLED CULVERT INLETS. ALL INLETS, STRUCTURES, PIPES, AND SWALES SHALL BE KEPT CLEAN AND FREE OF SEDIMENTATION AND DEBRIS.
- EROSION CONTROL FOR UTILITY CONSTRUCTION (STORM SEWER, WATER MAIN, ETC.) OUTSIDE OF THE PERIMETER CONTROL SHALL INCORPORATE THE FOLLOWING:
  - PLACE EXCAVATED TRENCH MATERIAL ON THE HIGH SIDE OF THE TRENCH.
  - BACKFILL, COMPACT AND STABILIZE THE TRENCH IMMEDIATELY AFTER PIPE CONSTRUCTION.
  - DISCHARGE TRENCH WATER INTO A SEDIMENTATION BASIN OR FILTERING TANK IN ACCORDANCE WITH BMPs PRIOR TO RELEASE INTO STORM SEWER OR DITCHES.

- AT A MINIMUM, SEDIMENT BASINS AND NECESSARY TEMPORARY DRAINAGE PROVISIONS SHALL BE CONSTRUCTED AND OPERATIONAL BEFORE BEGINNING OF SIGNIFICANT MASS GRADING OPERATIONS TO PREVENT OFFSITE DISCHARGE OF UNTREATED RUNOFF.
- IF APPLICABLE, ALL WATERCOURSES AND WETLANDS SHALL BE PROTECTED WITH DOUBLE ROW OF SILT FENCE TO PREVENT ANY DIRECT DISCHARGE FROM DISTURBED SOILS.
- ALL TEMPORARY AND PERMANENT EROSION CONTROL MEASURES MUST BE MAINTAINED AND REPAIRED AS NEEDED. THE GENERAL CONTRACTOR WILL BE RESPONSIBLE FOR INSPECTION AND REPAIR DURING CONSTRUCTION. THE OWNER WILL BE RESPONSIBLE IF EROSION CONTROL IS REQUIRED AFTER THE CONTRACTOR HAS COMPLETED THE PROJECT.
- TOPSOIL STOCKPILES SHALL HAVE A BERM OR TRENCH AROUND THE CIRCUMFERENCE AND STRAW WADDLES AROUND THE PERIMETER TO CONTROL SILT. IF TOPSOIL STOCKPILE REMAINS UNDISTURBED FOR MORE THAN SEVEN (7) DAYS, TEMPORARY SEEDING AND STABILIZATION IS REQUIRED.
- EROSION CONTROL MEASURES TEMPORARILY REMOVED FOR UNAVOIDABLE CONSTRUCTION ACTIVITIES SHALL BE IN WORKING ORDER IMMEDIATELY FOLLOWING COMPLETION OF SUCH ACTIVITIES OR PRIOR TO THE COMPLETION OF EACH WORK DAY, WHICH EVER OCCURS FIRST.
- MAINTAIN SOIL EROSION CONTROL DEVICES THROUGHOUT THE DURATION OF THIS PROJECT. ALL TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES SHALL BE REMOVED WITHIN THIRTY (30) DAYS AFTER FINAL SITE STABILIZATION IS ACHIEVED OR AFTER THE TEMPORARY MEASURES ARE NO LONGER NEEDED. DISTURBANCES ASSOCIATED WITH EROSION CONTROL REMOVAL SHALL BE IMMEDIATELY STABILIZED.
- PUMPS MAY BE USED AS BYPASS DEVICES. IN NO CASE SHALL PUMPED WATER BE DIVERTED OUTSIDE THE PROJECT LIMITS. PUMP DISCHARGE SHALL BE DIRECTED INTO AN APPROVED FILTER BAG OR APPROVED SETTLING DEVICE.
- GRADING EFFORTS SHALL BE CONDUCTED IN SUCH A MANNER AS TO MINIMIZE EROSION. EROSION AND SEDIMENT CONTROL MEASURES SHALL CONSIDER THE TIME OF YEAR, SITE CONDITIONS, AND THE USE OF TEMPORARY OR PERMANENT MEASURES. ALL DISTURBED AREAS THAT WILL NOT BE WORKED FOR A PERIOD OF FOURTEEN (14) DAYS REQUIRE TEMPORARY SEEDING FOR EROSION CONTROL. SEEDING FOR EROSION CONTROL SHALL BE IN ACCORDANCE WITH TECHNICAL STANDARDS.
- ALL DISTURBED SLOPES EXCEEDING 4:1, SHALL BE STABILIZED WITH NORTH AMERICAN GREEN SC-125-BN EROSION MATTING (OR APPROVED EQUAL) AND ALL CHANNELS SHALL BE STABILIZED WITH NORTH AMERICAN GREEN C125BN (OR APPROVED EQUAL) OR APPLICATION OF AN APPROVED POLYMER SOIL STABILIZATION TREATMENT OR A COMBINATION THEREOF, AS REQUIRED. EROSION MATTING AND/OR NETTING USED ONSITE SHALL BE INSTALLED IN ACCORDANCE WITH MANUFACTURER'S GUIDELINES. NO PLASTIC NETTING ALLOWED IN CITY ONLY JUTE/COTTON NETTING.
- DURING PERIODS OF EXTENDED DRY WEATHER, THE CONTRACTOR SHALL KEEP A WATER TRUCK ON SITE FOR THE PURPOSE OF WATERING DOWN SOILS WHICH MAY OTHERWISE BECOME AIRBORNE.THE CONTRACTOR IS RESPONSIBLE FOR CONTROLLING WIND EROSION (DUST) DURING CONSTRUCTION AT HIS/HER EXPENSE.
- DISTURBED AREAS AND AREAS USED FOR STORAGE OF MATERIALS THAT ARE EXPOSED TO PRECIPITATION SHALL BE VISUALLY INSPECTED FOR EVIDENCE OF, OR THE POTENTIAL FOR, POLLUTANTS ENTERING THE DRAINAGE SYSTEM ON A DAILY BASIS.
- QUALIFIED PERSONNEL (PROVIDED BY THE GENERAL/PRIME CONTRACTOR) SHALL INSPECT DISTURBED AREAS OF THE CONSTRUCTION SITE THAT HAVE NOT BEEN FINALLY STABILIZED AND EROSION AND SEDIMENT CONTROLS WITHIN 24 HOURS OF ALL 0.5-INCH, OR MORE, PRECIPITATION EVENTS WITH A MINIMUM INSPECTION INTERVAL OF ONCE EVERY SEVEN (7) CALENDAR DAYS IN THE ABSENCE OF A QUALIFYING RAIN OR SNOWFALL EVENT. REPORTING SHALL BE IN ACCORDANCE WITH OF THE GENERAL PERMIT. CONTRACTOR SHALL IMMEDIATELY ARRANGE TO HAVE ANY DEFICIENT ITEMS REVEALED DURING INSPECTIONS REPAIRED/REPLACED.
- SEE ADDITIONAL DETAILS AND NOTES ON SITE STABILIZATION AND CONSTRUCTION DETAILS.

**DEMOLITION NOTES**

- PERIMETER SILT FENCING AND CONSTRUCTION ENTRANCES SHALL BE INSTALLED PRIOR TO ANY DEMOLITION. PLEASE REFER TO GRADING AND EROSION AND SEDIMENT CONTROL PLAN SHEETS FOR FURTHER DETAILS.
- EXISTING FEATURES ARE SHOWN FOR INFORMATIONAL PURPOSES ONLY AND ARE NOT GUARANTEED TO BE ACCURATE OR ALL INCLUSIVE. CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THE TYPE, LOCATION, SIZE AND ELEVATION OF UNDERGROUND UTILITIES AS THEY DEEM NECESSARY TO AVOID DAMAGE THERETO. CONTRACTOR/OWNER SHALL CALL "MISS DIG" PRIOR TO ANY DEMOLITION.
- CONTRACTOR SHALL PERFORM ALL DEMOLITION WORK IN ACCORDANCE WITH ALL APPLICABLE FEDERAL, STATE, AND LOCAL REQUIREMENTS.
- COORDINATE WITH ALL APPLICABLE UTILITY COMPANIES AND THE MUNICIPALITY TO PROTECT EXISTING FUNCTIONING UTILITIES, BULKHEAD/REMOVE CONNECTIONS AS NECESSARY, AND TO ENSURE ALL UTILITIES ARE INACTIVE PRIOR TO ANY DEMOLITION ACTIVITIES. CONTRACTOR SHALL TAKE ADEQUATE PRECAUTIONS TO ENSURE PROTECTION OF EXISTING UTILITIES THAT ARE NOT TO BE IMPACTED. THE CONTRACTOR IS RESPONSIBLE FOR REPAIR OF ANY EXISTING UTILITIES DAMAGED AS A RESULT OF THE DEMOLITION.
- VOIDS LEFT BY REMOVAL OF FEATURES SHALL BE MODIFIED/FILLED TO PREVENT PONDING OF WATER.
- DEMOLISH AND DISPOSE EXISTING PIPING, CABLE/WIRES, STRUCTURES, OR OTHER SURFACE FEATURES INDICATED ON THE PLANS TO BE REMOVED.
- CLEARING AND GRUBBING DESIGNATIONS SHALL INCLUDE CLEARING, GRUBBING, REMOVING, AND DISPOSING OF ALL VEGETATION AND DEBRIS WITHIN THE LIMITS OF CONSTRUCTION, AS DESIGNATED ON THE PLANS. CONTRACTOR SHALL REMOVE ONLY THOSE TREES ABSOLUTELY NECESSARY TO ALLOW FOR CONSTRUCTION.
- CONTRACTOR SHALL REMOVE EXISTING FENCING IN A MANNER TO ALLOW REUSE. ANY FENCING MATERIAL TO BE REUSED IN THE CONSTRUCTION OF RELOCATED FENCE LINES SHALL BE PRESENTED TO ENGINEER FOR INSPECTION AND PROPOSED CONTRACT DEDUCT ASSOCIATED WITH REUSE OF THE SALVAGED MATERIAL. ENGINEER OR OWNER WILL PROVIDE WRITTEN ACCEPTANCE OF THE PROPOSED SALVAGED MATERIAL.
- CONTRACTOR SHALL COORDINATE WITH THE MUNICIPALITY FOR TERMINATION OF PUBLIC UTILITY CONNECTIONS TO SITE.
- CONTRACTOR SHALL COORDINATE STOCKPILE LIMITS AND LOCATIONS WITH ENGINEER/OWNER PRIOR TO DEMOLITION.

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 (262) 754-8888  
 CHICAGO | MILWAUKEE | NATIONWIDE  
 PEG JOB #: 6075.00-W1

**GENERAL NOTES**  
 N.T.S.



LogicDA.com | 414.909.0080  
 Project Manager: AEV  
 Job Number: 24-092

Additional Info

Project Name

**NEW BUILDING FOR:  
STARBUCKS**

101 SUNSET DR.  
WAUKESHA, WI 53186

**- PRELIMINARY -  
NOT FOR CONSTRUCTION**

Dates/Revisions

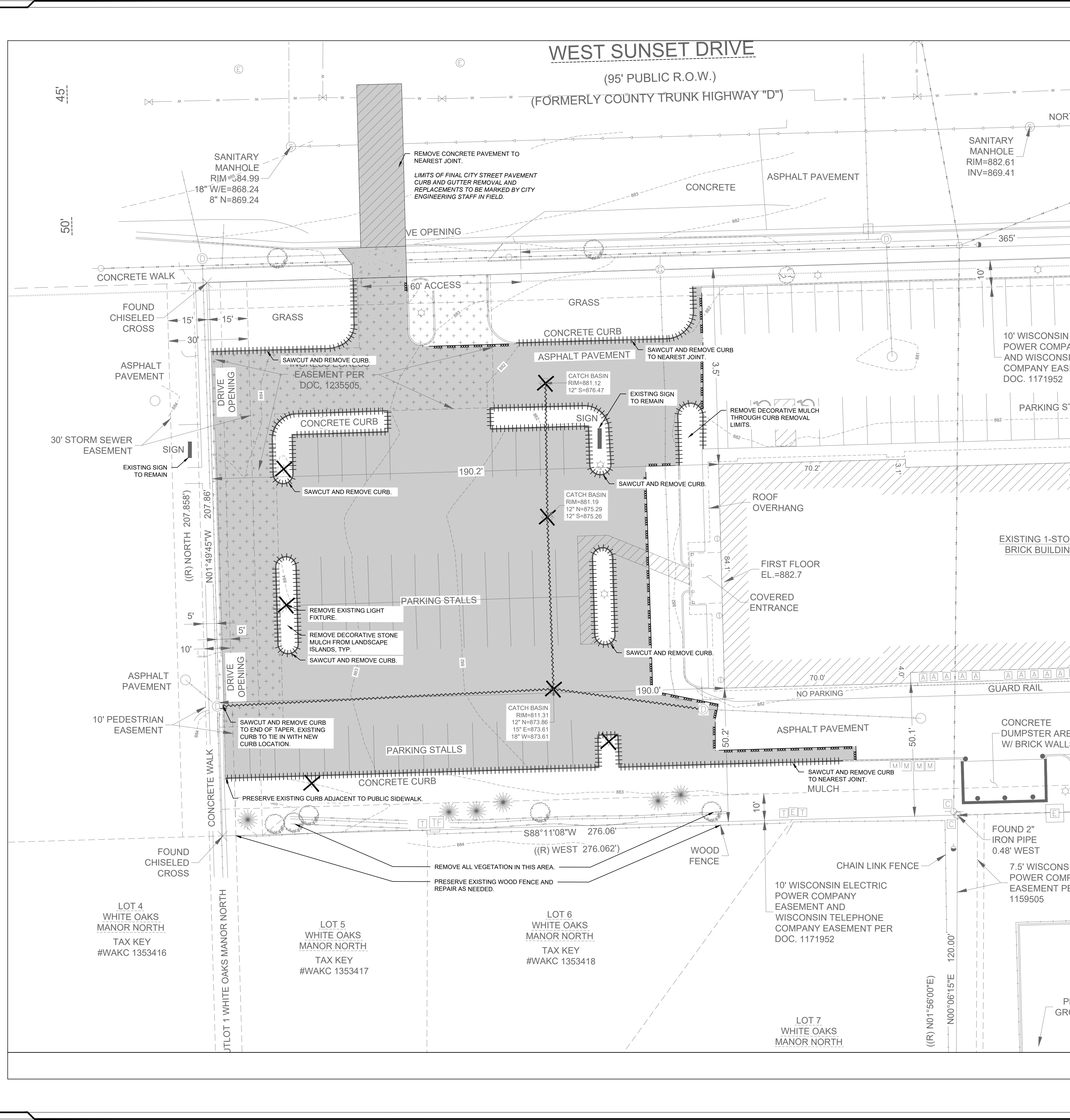
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COMMISSION	
02/17/2025	▲
PERMIT SET	

Drawing Title

GENERAL NOTES

PLOT DATE: 2/17/2025

FILE NAME: Z:\PROJECTS\2024\6075-00-WA\CAD\SHETS\6075-00-EXISTING CONDITIONS & DEMO PLAN.DWG



### LEGEND

SANITARY MANHOLE	⊙	STORM SEWER	—
STORM MANHOLE	⊙	WATER MAIN	—
CATCH BASIN	⊙	LIGHTING	⊙
INLET	⊙	ELECTRICAL CABLE	—
PRECAST FLARED END SECTION	⊙	ELECTRICAL TRANSFORMER OR PEDESTAL	⊙
CONCRETE HEADWALL	⊙	POWER POLE	⊙
VALVE VAULT	⊙	POWER POLE WITH LIGHT	⊙
VALVE BOX	⊙	GUY WIRE	⊙
FIRE HYDRANT	⊙	STREET SIGN	⊙
BUFFALO BOX	⊙	GAS MAIN	—
CLEANOUT	⊙	TELEPHONE LINE	—
SANITARY SEWER	—	CONTOUR	—
FORCE MAIN	—	TREE	⊙
CONCRETE SIDEWALK	—	EASEMENT LINE	—

**EXISTING CONDITIONS SURVEY:**

EXISTING CONDITIONS SURVEY PROVIDED BY PINNACLE ENGINEERING GROUP. ALTHOUGH PEG HAS NO REASON TO BELIEVE THE SURVEY IS INACCURATE, PEG MAKES NO WARRANTIES THAT EXISTING INFORMATION CONTAINED WITHIN THESE PLANS IS ALL-INCLUSIVE OR ACCURATE. CONTRACTOR SHALL UNDERTAKE NECESSARY EFFORTS TO VERIFY THE EXISTING CONDITIONS PRIOR TO THE START OF MATERIAL PROCUREMENT AND CONSTRUCTION EFFORTS/ACTIVITIES.

**CONTRACTOR RESPONSIBILITY:**

THE INFORMATION SHOWN ON THIS DRAWING CONCERNING TYPE AND LOCATION OF UNDERGROUND UTILITIES IS NOT GUARANTEED TO BE ACCURATE OR ALL-INCLUSIVE. THE CONTRACTOR IS RESPONSIBLE FOR MAKING HIS OWN DETERMINATIONS AS TO THE TYPE AND LOCATION OF UNDERGROUND UTILITIES AS MAY BE NECESSARY TO AVOID DAMAGE THERETO. IF ADDITIONAL UTILITIES ARE KNOWN TO EXIST IN THE PROPERTY, THE OWNER WILL PROVIDE EXISTING PLANS OF OTHER UTILITIES SERVING THE SITE AND THE BUILDING THAT OTHERWISE CANNOT BE LOCATED BY A VISUAL OBSERVATION OF THE PROPERTY OR OF WHICH THE SURVEYOR WOULD HAVE NO KNOWLEDGE.

### LEGEND

REMOVE EXISTING PAVEMENT	⊙
REMOVE EXISTING CONCRETE	⊙
REMOVE EXISTING CURB AND GUTTER	⊙
REMOVE EXISTING UTILITY	⊙
SAWCUT EXISTING PAVEMENT	⊙
STRUCTURE TO BE REMOVED	⊙

**CONTRACTOR RESPONSIBILITY: SEE ADDITIONAL CONSTRUCTION NOTES LOCATED ON SHEET C-2**

**ALL WORK WITHIN THE CITY RIGHT-OF-WAY AND CITY EASEMENTS TO BE IN ACCORDANCE WITH CURRENT CITY STANDARD SPECIFICATIONS & DETAILS**



GRAPHICAL SCALE (FEET)

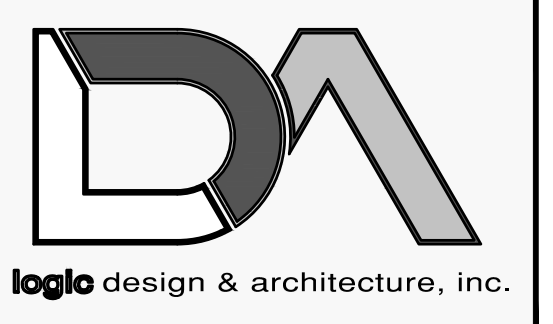
0 1" = 20' 40'

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EXISTING CONDITIONS & DEMO PLAN  
 1" = 20'



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 Job Number: 24-092

Additional Info

Project Name

NEW BUILDING FOR:  
 STARBUCKS

101 SUNSET DR.  
 WAUKESHA, WI 53186

Dates/Revisions

01/24/2025	FINAL PLAN
02/17/2025	COMMISSION
	PERMIT SET

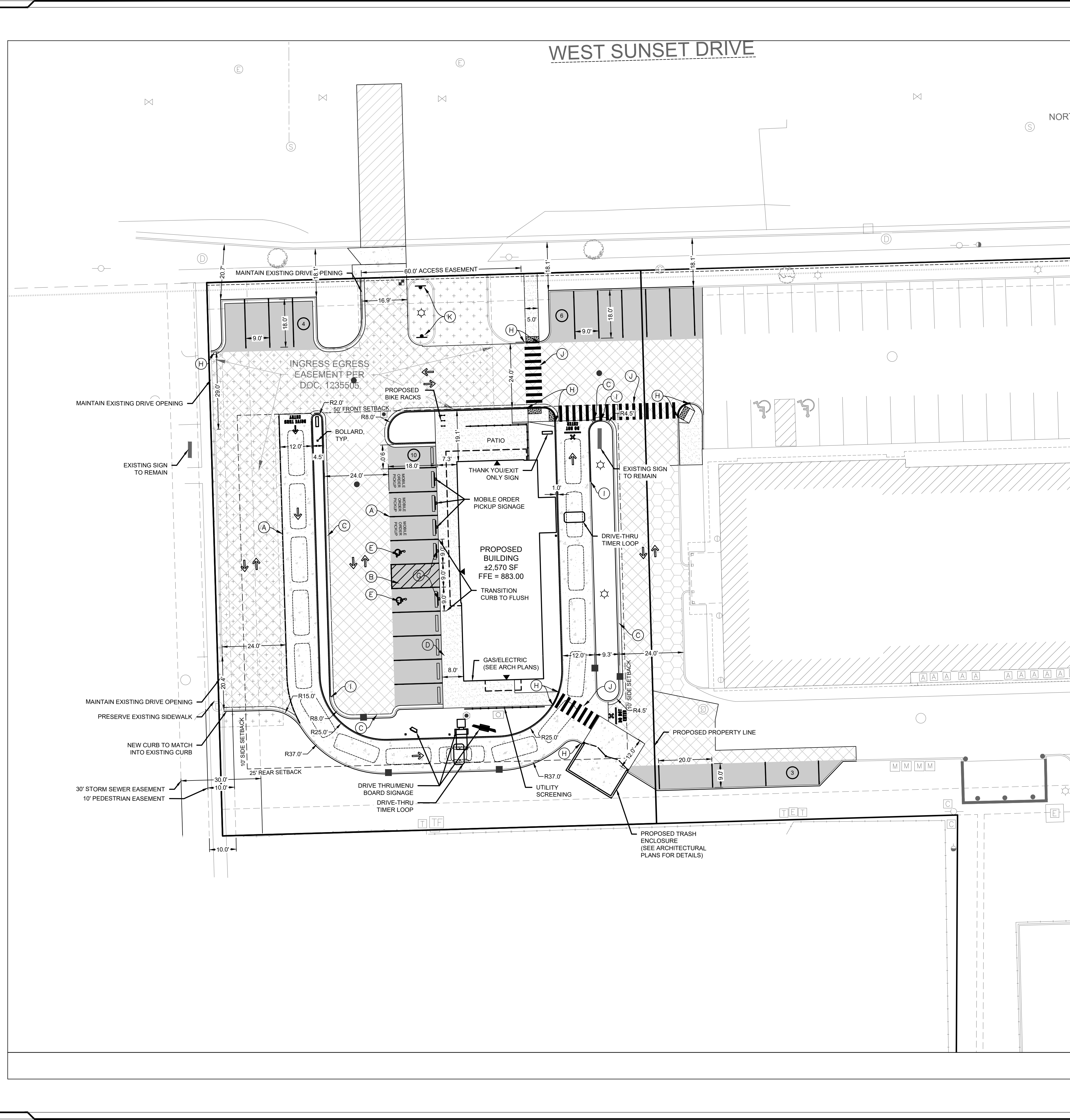
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PLOT DATE: 2/17/2025

FILE NAME: Z:\PROJECTS\2024\6075.00-NEW CAD SHEETS\6075.00-SITE-DIMENSIONAL & PAVING PLAN.DWG



### LEGEND

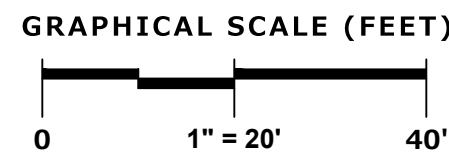
	<b>LIGHT DUTY ASPHALT PAVEMENT</b> 1" CRUSHED AGGREGATE BASE COURSE (1-1/4" DENSE GRADED LIMESTONE) 4" HMA PAVEMENT (2 LIFTS) 2" ASPHALT BINDER COURSE - (3 LT 58-28.5) 2" ASPHALT SURFACE COURSE - (5 LT 58-28.5)
	<b>HEAVY DUTY ASPHALT PAVEMENT</b> 10" CRUSHED AGGREGATE BASE COURSE CONFORMING TO GRADATION REQUIREMENTS OF WISDOT STANDARD SPECIFICATIONS, SECTION 301 AND 305. 5" HMA PAVEMENT (2 LIFTS) 3" BINDER COURSE - 3 LT 58-28.5 2" SURFACE COURSE - 5 LT 58-28.5
	<b>CONCRETE PAVEMENT</b> 7" CONCRETE SLAB WITH 6 x 6 - W2.9 x W2.9 W.W.M. 6" MIN. - 1 1/2" CRUSHED AGGREGATE BASE COURSE (DENSE GRADED LIMESTONE)
	<b>CONCRETE SIDEWALK</b> 5" CONCRETE SIDEWALK 6" - 1 1/2" CRUSHED AGGREGATE BASE COURSE (DENSE GRADED LIMESTONE)
	<b>PAVEMENT MILL AND OVERLAY</b> 2" DEPTH
	<b>PAVEMENT RESTORATION</b> REPLACE IN-KIND
	<b>CURB AND GUTTER</b> REVERSE PITCH CURB & GUTTER
	<b>4" WHITE STRIPE</b>
	<b>4" DIAGONAL AT 45° SPACED 2' O.C.</b>
	<b>18" CURB &amp; GUTTER (SEE DETAIL)</b>
	<b>INTEGRAL CURB &amp; SIDEWALK (SEE DETAIL)</b>
	<b>ADA STALL INSIGNIA</b>
	<b>ADA COMPLIANT RAMP W/ TRUNCATED DOMES (SEE DETAIL), TAPER CURB HEAD AND DEPRESS WALK/CURB</b>
	<b>ADA PARKING STALL SIGNAGE WITH BOLLARD</b>
	<b>TAPER CURB HEAD AND DEPRESS WALK/CURB</b>
	<b>CURB TRANSITION</b>
	<b>12" X 6" CROSS WALK BARS SPACED 30" O.C.</b>
	<b>KEEP RIGHT SIGN</b>
	<b>PARKING COUNT (FOR INFORMATION ONLY, NOT TO BE PAINTED)</b>
	<b>MAN DOOR</b>

### SITE DATA - PROPOSED

SITE AREA:	0.77 AC (33,880 S.F.)
DISTURBANCE LIMITS:	0.67 AC (29,531 S.F.)
PARKING STALLS:	23 STALLS (2 ADA)
BUILDING AREA:	0.05 AC (2,570 S.F.)
GRASS AREA:	0.20 AC (8,855 S.F.)
TOTAL IMPERVIOUS AREA:	0.57 AC (25,025 S.F.)
GREEN SPACE (%):	26.1%

### SITE DATA - EXISTING

EXISTING SITE IMPERVIOUS:	0.59 AC (25,782 S.F.)
EXISTING SITE PARKING:	47 STALLS (2 ADA)

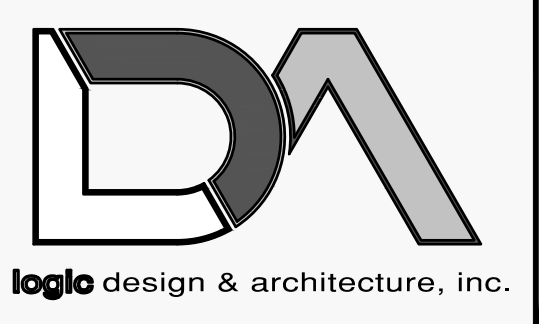


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SITE DIMENSIONAL & PAVING PLAN  
1" = 20'



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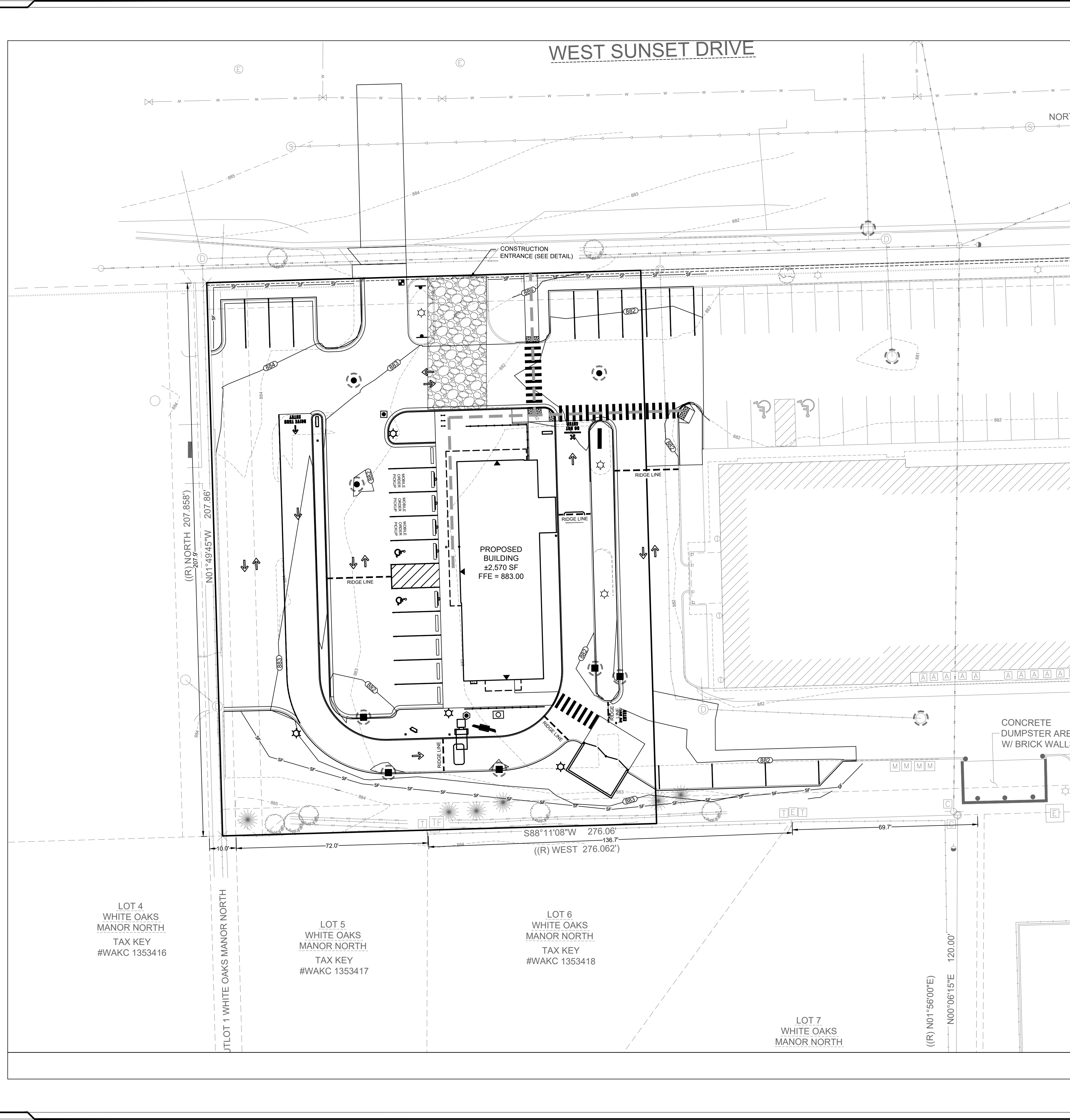
SITE DIMENSIONAL & PAVING PLAN

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PLOT DATE: 2/17/2025

FILE NAME: Z:\PROJECTS\2024\6075-00-WAKAC\SHEETS\6075-00-GRADING & EROSION CONTROL PLAN.DWG



WEST SUNSET DRIVE

NORT

PROPOSED BUILDING  
±2,570 SF  
FFE = 883.00

CONCRETE DUMPSTER ARE  
W/ BRICK WALL

LOT 4  
WHITE OAKS  
MANOR NORTH  
TAX KEY  
#WAKC 1353416

LOT 5  
WHITE OAKS  
MANOR NORTH  
TAX KEY  
#WAKC 1353417

LOT 6  
WHITE OAKS  
MANOR NORTH  
TAX KEY  
#WAKC 1353418

LOT 7  
WHITE OAKS  
MANOR NORTH

**LEGEND**

- SANITARY SEWER MANHOLE
- STORM SEWER MANHOLE
- STORM STORM CATCH BASIN (ROUND CASTING)
- STORM SEWER CATCH BASIN (RECTANGULAR CASTING)
- ▼ PRECAST FLARED END SECTION
- CLEANOUT
- VALVE BOX
- FIRE HYDRANT
- PROPOSED CONTOUR
- + 750.0 PROPOSED SPOT ELEVATION
- DIRECTION OF SURFACE FLOW
- ACCESSIBLE ROUTE
- SILT FENCE
- WISDOT TYPE D INLET PROTECTION
- CONSTRUCTION ENTRANCE
- HYDROSEED

**CONTRACTOR RESPONSIBILITY: SEE ADDITIONAL CONSTRUCTION NOTES LOCATED ON SHEET C-2 & C-9**

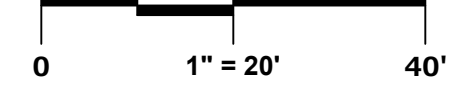
**CONSTRUCTION SITE SEQCING**

1. INSTALL PERIMETER SILT FENCE, INLET PROTECTION, TEMPORARY CONSTRUCTION ENTRANCE AND ANY OTHER EROSION CONTROL MEASURES
  2. DEMOLITION AND REMOVAL OF BUILDING, PAVEMENT, AND LANDSCAPING.
  3. STRIP AND STOCKPILE TOPSOIL, INSTALL SILT FENCE AROUND PERIMETER OF STOCKPILE.
  4. CONDUCT ROUGH GRADING EFFORTS AND INSTALL CHECK DAMS AND SEDIMENT TRAP/BASINS AS NEEDED. IF SEDIMENT BASINS (BIO RETENTION BASINS) ARE TO BE USED, BOTTOM OF BASIN SHALL BE LEFT A MINIMUM OF 1' ABOVE FINAL GRADE IN ORDER TO PRESERVE NATIVE SOIL INTERFACE. DO NOT EXCAVATE FINAL 1' UNTIL FINAL SITE STABILIZATION OCCURS.
  5. CONSTRUCTION OF FOUNDATIONS AND BUILDING.
  6. INSTALL UTILITY PIPING AND STRUCTURES, IMMEDIATELY INSTALL INLET PROTECTION.
  7. COMPLETE FINAL GRADING, INSTALLATION OF GRAVEL BASE COURSES, PLACEMENT OF CURBS, PAVEMENTS, WALKS, ETC.
  8. INSTALL TOPSOIL, AND LANDSCAPING. IMMEDIATELY STABILIZE DISTURBED AREAS WITH EROSION CONTROLS.
  9. EROSION CONTROL MEASURES SHALL BE REMOVED ONLY AFTER SITE CONSTRUCTION IS COMPLETE WITH ALL SOIL SURFACES HAVING AN ESTABLISHED VEGETATIVE COVER.
- CONTRACTOR MAY MODIFY SEQUENCING AFTER ITEM 1 AS NEEDED TO COMPLETE CONSTRUCTION IF EROSION CONTROLS ARE MAINTAINED IN ACCORDANCE WITH THE CONSTRUCTION SITE EROSION CONTROL REQUIREMENTS.

**NOTE :**  
REMAINING DISTURBED AREAS OF SLOPES 5:1 OR FLATTER TO BE HYDROSEDED



GRAPHICAL SCALE (FEET)



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(262) 754-8888

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PEG JOB #: 6075-00-WI

GRADING & EROSION CONTROL PLAN  
1" = 20'



LogicDA.com | 414.909.0080  
Project Manager: AEV  
Job Number: 24-092

**Additional Info**

**Project Name**

NEW BUILDING FOR:  
STARBUCKS

101 SUNSET DR.  
WAUKESHA, WI 53186

**Dates/Revisions**

01/24/2025 FINAL PLAN COMMISSION	▲
02/17/2025 PERMIT SET	▲

**Drawing Title**

GRADING & EROSION CONTROL PLAN

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FILE NAME: Z:\PROJECTS\2024\2024-08-16\W10-CAD\DWG\SPOT-GRD-PLAN.DWG DATE: 2/17/2025

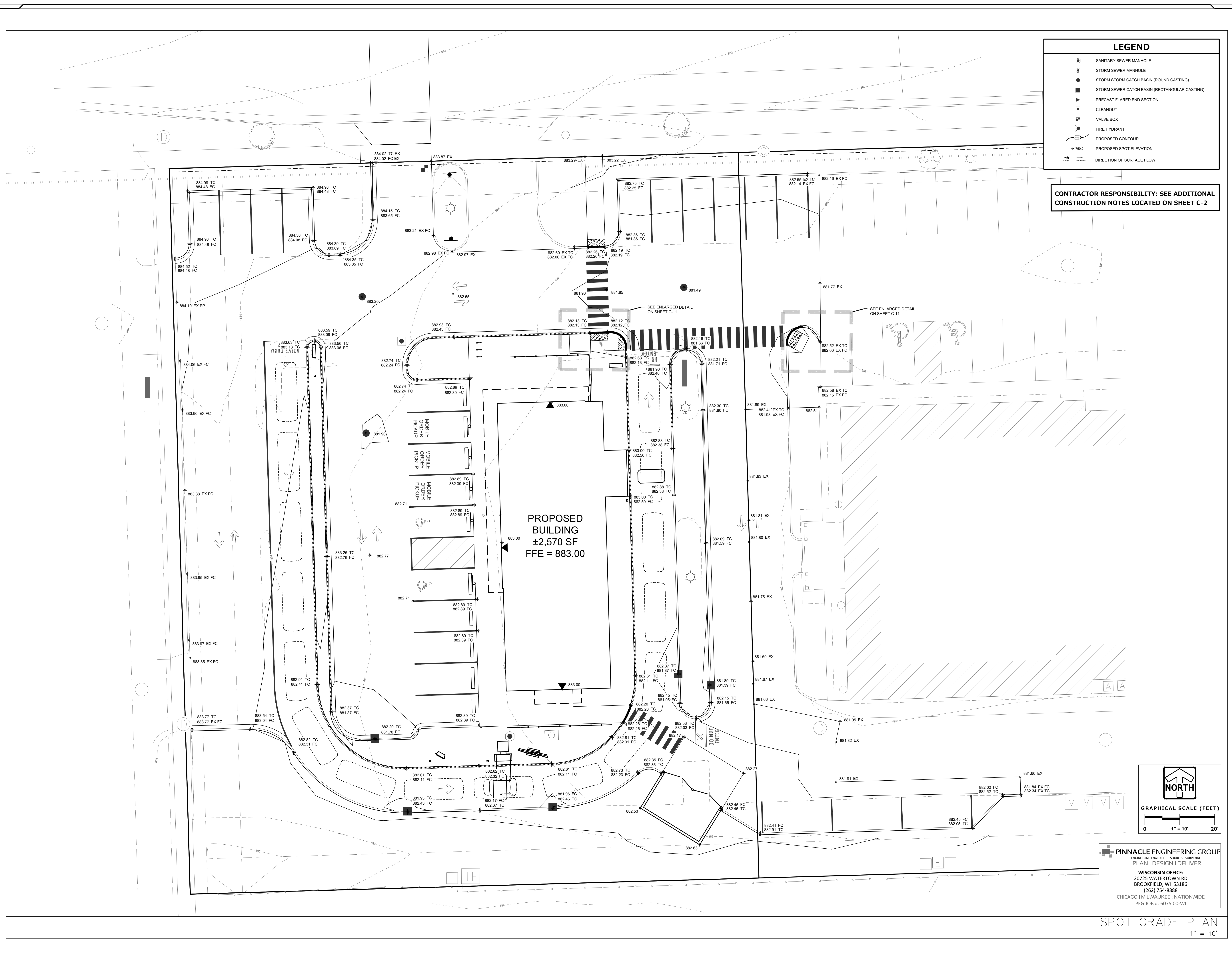


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Job Number: 23-024

### LEGEND

- SANITARY SEWER MANHOLE
- STORM SEWER MANHOLE
- STORM STORM CATCH BASIN (ROUND CASTING)
- STORM SEWER CATCH BASIN (RECTANGULAR CASTING)
- ▬ PRECAST FLARED END SECTION
- CLEANOUT
- VALVE BOX
- FIRE HYDRANT
- - - PROPOSED CONTOUR
- ± 790.0 PROPOSED SPOT ELEVATION
- DIRECTION OF SURFACE FLOW

**CONTRACTOR RESPONSIBILITY: SEE ADDITIONAL CONSTRUCTION NOTES LOCATED ON SHEET C-2**



Additional Info

Project Name

NEW BUILDING FOR: STARBUCKS  
101 SUNSET DR.  
WAUKESHA, WI  
53186

Dates/Revisions

01/24/2025	FINAL PLAN COMMISSION	▲
02/17/2025	PERMIT SET	▲

Drawing Title

SPOT GRADE PLAN

C-6

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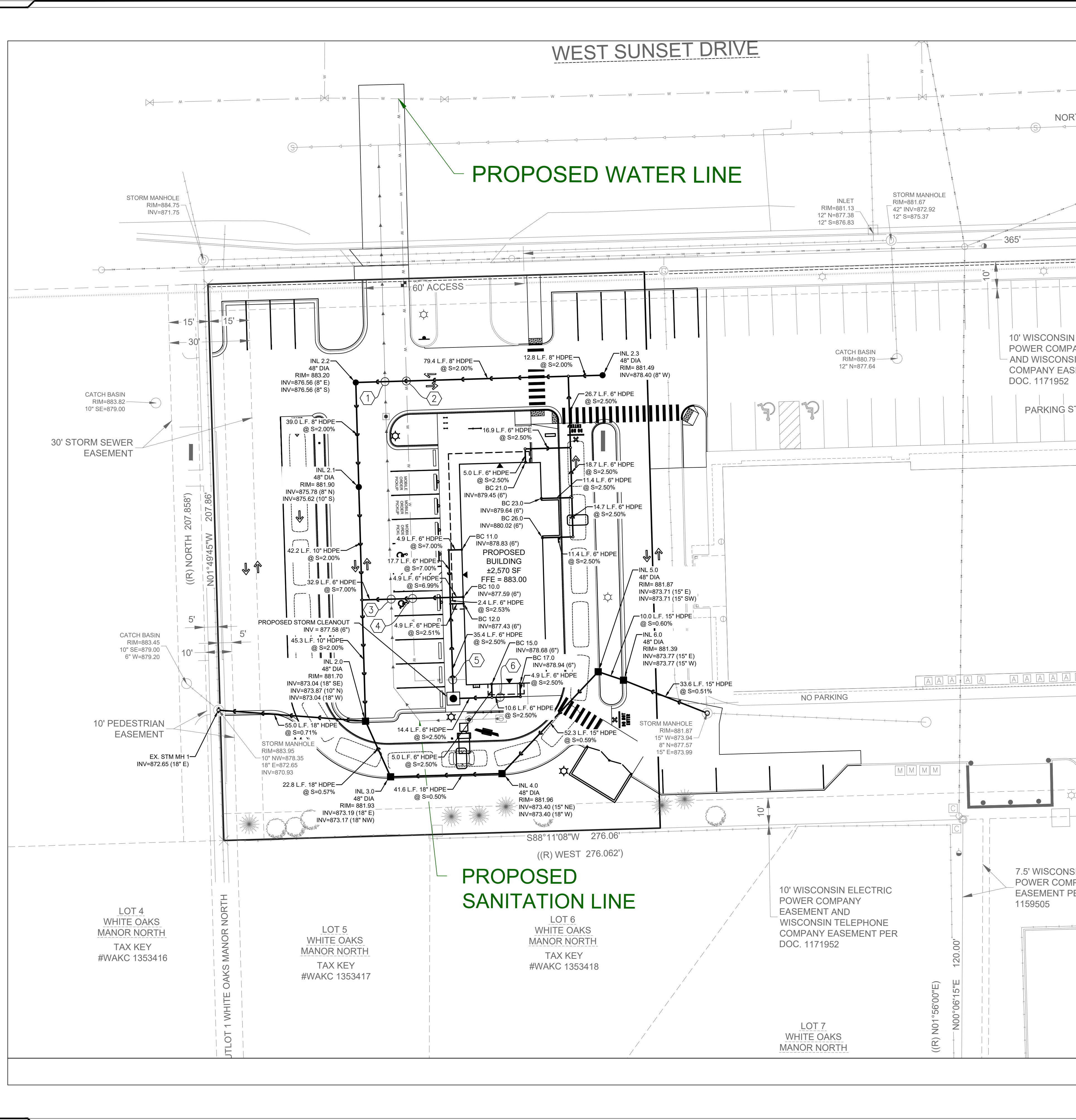
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PLAN | DESIGN | DELIVER

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PEG JOB #: 6075.00-WI

SPOT GRADE PLAN  
1" = 10'

PLOT DATE: 2/17/2025

FILE NAME: Z:\PROJECTS\2024\6075-00-WA\CAD\SHEETS\6075-00-STORM-SEWER-PLAN.DWG



WEST SUNSET DRIVE

PROPOSED WATER LINE

PROPOSED SANITATION LINE

LEGEND

	SANITARY SEWER MANHOLE
	STORM SEWER MANHOLE
	STORM SEWER CATCH BASIN (ROUND CASTING)
	STORM SEWER CATCH BASIN (RECTANGULAR CASTING)
	PRECAST CONCRETE FLARED END SECTION
	CLEANOUT
	CORPORATION STOP
	FIRE HYDRANT
	CATCH BASIN UNDERDRAIN
	SANITARY SEWER
	FORCE MAIN
	STORM SEWER
	SINGLE WALL PERFORATED DRAIN TILE
	SOLID WALL DRAIN TILE
	WATER MAIN
	FIRE PROTECTION
	UTILITY CROSSING
	ELECTRICAL CABLE
	GAS MAIN
	TELEPHONE LINE
	OVERHEAD WIRES
	LIGHTING
	ELECTRICAL TRANSFORMER OR PEDESTAL

CONTRACTOR RESPONSIBILITY: SEE ADDITIONAL CONSTRUCTION NOTES LOCATED ON SHEET C-2

ALL PROPOSED CATCH BASINS SHALL HAVE DONUT DRAINTILE PER CONSTRUCTION DETAILS IN PLAN SET.

CROSSINGS

1	6" STM OVER 6" SAN 6" STM B.O.P. 876.78 6" SAN T.O.P. 872.14
2	6" STM OVER 2" WM 6" STM B.O.P. 876.94 2" WM T.O.P. 875.25
3	6" STM OVER 6" SAN 6" STM B.O.P. 875.71 6" SAN T.O.P. 873.76
4	6" STM OVER 2" WM 6" STM B.O.P. 876.27 2" WM T.O.P. 874.03
5	6" STM OVER 2" WM 6" STM B.O.P. 878.02 2" WM T.O.P. 875.67
6	6" STM OVER 6" SAN 6" STM B.O.P. 878.83 6" SAN T.O.P. 875.41



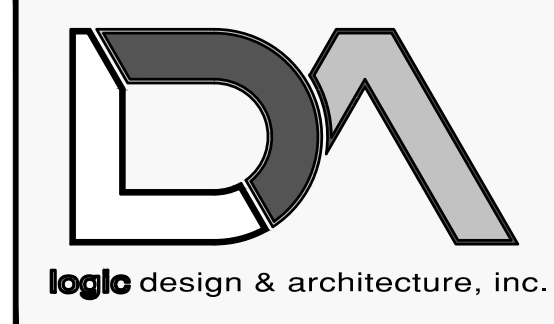
GRAPHICAL SCALE (FEET)  
0 1" = 20' 40'

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CHICAGO | MILWAUKEE | NATIONWIDE  
 PEG JOB #: 6075-00-WI

STORM SEWER PLAN  
1" = 20'



LogicDA.com | 414.909.0080  
Project Manager: AEV  
Job Number: 24-092

Additional Info

Project Name

NEW BUILDING FOR:  
STARBUCKS  
101 SUNSET DR.  
WAUKESHA, WI 53186

Dates/Revisions

01/24/2025	FINAL PLAN	▲
02/17/2025	COMMISSION PERMIT SET	▲

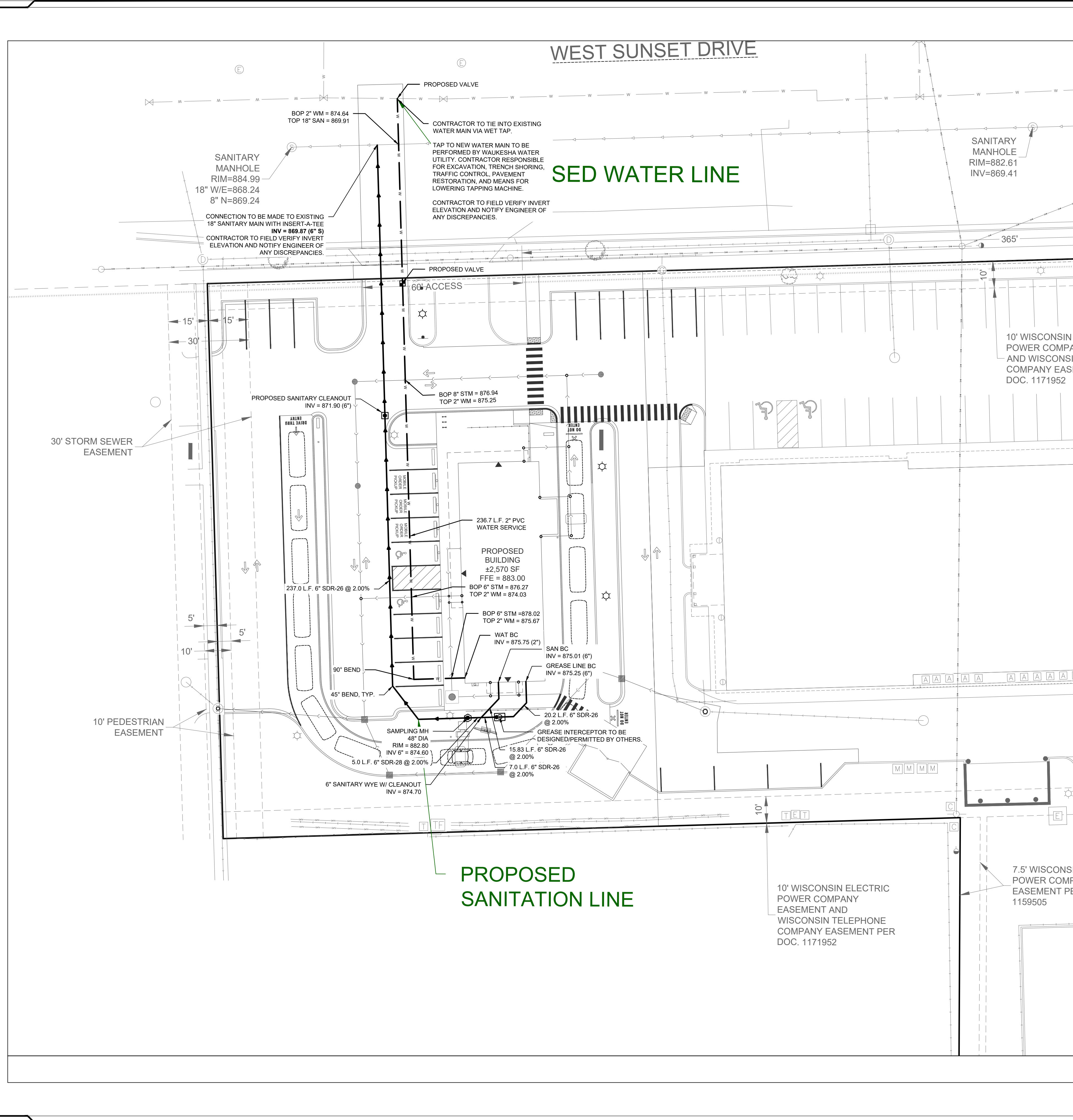
Drawing Title  
STORM SEWER PLAN

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PLOT DATE: 2/17/2025

FILE NAME: Z:\PROJECTS\2024\6075.00-WAUCAD\SHEETS\6075.00-SANITARY & WATERMAIN PLAN.DWG

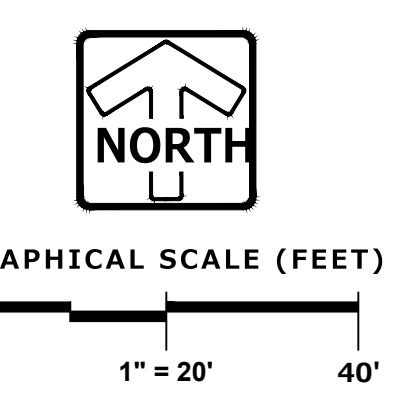


LEGEND	
	SANITARY SEWER MANHOLE
	STORM SEWER MANHOLE
	STORM SEWER CATCH BASIN (ROUND CASTING)
	STORM SEWER CATCH BASIN (RECTANGULAR CASTING)
	PRECAST CONCRETE FLARED END SECTION
	CLEANOUT
	CORPORATION STOP
	FIRE HYDRANT
	CATCH BASIN UNDERDRAIN
	SANITARY SEWER
	FORCE MAIN
	STORM SEWER
	SINGLE WALL PERFORATED DRAIN TILE
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	WATER MAIN
	FIRE PROTECTION
	UTILITY CROSSING
	ELECTRICAL CABLE
	GAS MAIN
	TELEPHONE LINE
	OVERHEAD WIRES
	LIGHTING
	ELECTRICAL TRANSFORMER OR PEDESTAL

**CONTRACTOR RESPONSIBILITY: SEE ADDITIONAL CONSTRUCTION NOTES LOCATED ON SHEET C-2 & C-10**

**ALL PROPOSED CATCH BASINS SHALL HAVE DONUT DRAINTILE PER CONSTRUCTION DETAILS IN PLAN SET.**

**CROSSINGS**  
SEE SHEET C-7 FOR CROSSING INFORMATION

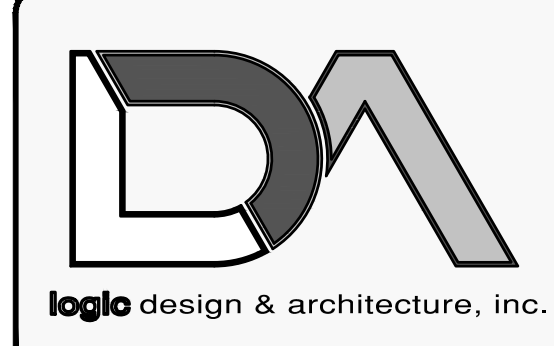


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CHICAGO | MILWAUKEE | NATIONWIDE  
PEG JOB #: 6075.00-WI

**SANITARY & WATERMAIN PLAN**  
1" = 20'



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Project Manager: AEV  
Job Number: 24-092

Additional Info

Project Name

**NEW BUILDING FOR:  
STARBUCKS**

101 SUNSET DR.  
WAUKESHA, WI 53186

Dates/Revisions

01/24/2025	FINAL PLAN	▲
02/17/2025	COMMISSION	▲
	PERMIT SET	▲

Drawing Title

SANITARY & WATERMAIN PLAN

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 Project Manager: AEV  
 Job Number: 24-092

Additional Info

Project Name

**NEW BUILDING FOR:  
STARBUCKS**

101 SUNSET DR.  
WAUKESHA, WI 53186

Dates/Revisions

01/24/2025 FINAL PLAN COMMISSION	1
02/17/2025 PERMIT SET	2

Drawing Title  
CONSTRUCTION DETAILS

C-9

**1.0 POTENTIAL POLLUTANT SOURCES**

GIVEN THE PROPOSED ACTIVITY ON THE PROJECT SITE, THE PRIMARY POTENTIAL POLLUTANT SOURCE ASSOCIATED WITH THIS CONSTRUCTION PROJECT IS SOIL EROSION AND TRANSPORTATION. REFER TO SECTION 4 OF THIS PLAN. ADDITIONAL POTENTIAL SOURCES OF POLLUTION MAY INCLUDE: FUEL TANKS, WASTE CONTAINERS, OIL OR OTHER PETROLEUM PRODUCTS, DETERGENTS, PAINTS, CONSTRUCTION DEBRIS, SANITARY STATIONS, FERTILIZERS, AND DUST; REFER TO SECTION 5 OF THIS PLAN.

**2.0 EROSION AND SEDIMENT CONTROL IMPLEMENTATION**

THE FOLLOWING ARE DESCRIPTIONS OF THE EROSION AND SEDIMENT CONTROL PRACTICES THAT SHALL BE IMPLEMENTED DURING CONSTRUCTION OF THIS PROJECT. IN ADDITION TO THESE MEASURES, CONTRACTOR SHALL DISTURB ONLY AREAS NECESSARY TO COMPLETE THE CONSTRUCTION PROJECT. ALL PRACTICES SHALL BE CONDUCTED IN ACCORDANCE WITH THE BEST MANAGEMENT PRACTICES (BMP).

**2.1 CONSTRUCTION AND EROSION CONTROL SEQUENCING**

CONSTRUCTION SEQUENCING WILL BE UTILIZED AS A MEANS OF CONTROLLING EROSION AND LIMITING SEDIMENT TRANSPORT. SEQUENCING AS LISTED BELOW IS GENERAL IN NATURE AND MAY VARY DEPENDING ON WEATHER CONDITIONS AND/OR PHASING OF CONSTRUCTION. THE CONTRACTOR SHALL SUBMIT A DETAILED SITE SEQUENCING PLAN TO OWNER FOR APPROVAL AT LEAST 9 BUSINESS DAYS PRIOR TO COMMENCEMENT OF ANY CONSTRUCTION ACTIVITIES. CONTRACTOR MAY MODIFY SEQUENCING AFTER ITEM 6 AS NEEDED TO COMPLETE CONSTRUCTION ONLY IF EROSION CONTROLS ARE MAINTAINED IN ACCORDANCE WITH THE CONSTRUCTION SITE EROSION AND SEDIMENT CONTROL REQUIREMENTS.

- INSTALL TEMPORARY CONSTRUCTION ENTRANCES, INLET PROTECTION ON EXISTING STORM SEWER AND CULVERT INLET LOCATIONS, AND PERIMETER SILT FENCING.
- INSTALL SILT FENCING ALONG THE PERIMETER OF PROPOSED TOPSOIL STOCKPILE LOCATIONS. THE FIRST TOPSOIL DEPOSITED WITHIN THE STOCKPILE LIMITS SHALL BE PLACED TO CREATE TEMPORARY BERMING ALONG THE SILT FENCE TO PREVENT DIRECT STORMWATER RUNOFF AGAINST SILT FENCING. CONTRACTOR SHALL LIMIT LAND DISTURBING ACTIVITIES ASSOCIATED WITH TEMPORARY BERMING TO A MINIMUM.
- STRIP TOPSOIL WITHIN THE LIMITS OF THE SEDIMENT TRAPS THAT WILL BE USED FOR TEMPORARY SEDIMENT CONTROL. STRIPPED TOPSOIL SHALL BE PLACED TO CONSTRUCT DIVERSION BERMING OR PLACED WITHIN THE STOCKPILE LIMITS.
- STRIP TOPSOIL ALONG THE REMAINDER OF DIVERSION BERMING AND IMMEDIATELY PLACE TOPSOIL TO CREATE THE BERMING. MASS TOPSOIL STRIPPING SHALL NOT OCCUR UNTIL ALL DOWNSTREAM BERMING AND IMMEDIATELY PLACE TOPSOIL TO CREATE THE BERMING. MASS TOPSOIL STRIPPING SHALL NOT OCCUR UNTIL ALL DOWNSTREAM BERMING AND IMMEDIATELY PLACE TOPSOIL TO CREATE THE BERMING. MASS TOPSOIL STRIPPING SHALL NOT OCCUR UNTIL ALL DOWNSTREAM BERMING AND IMMEDIATELY PLACE TOPSOIL TO CREATE THE BERMING.
- CONDUCT ROUGH GRADING OPERATIONS AND UTILITY PIPING INSTALLATION. DRAIN TILE SHALL NOT BE INSTALLED UNTIL UPLAND AREAS CONTRIBUTING STORMWATER RUNOFF ARE STABILIZED. DITCH CHECKS SHALL BE INSTALLED WITHIN DRAINAGE DITCHES IMMEDIATELY FOLLOWING CREATION OF DITCHES, AND INLET PROTECTION SHALL BE INSTALLED TO PROTECT ANY STORM SEWER OR CULVERTS THAT WILL FUNCTION DURING CONSTRUCTION.
- FINE GRADE SUB-GRADE SOILS WITHIN PAVEMENT AND BUILDING LIMITS. PLACE STONE BASE MATERIAL AS SOON AS POSSIBLE FOLLOWING COMPLETION OF FINE GRADING EFFORTS.
- FINE GRADE REMAINING DISTURBED AREAS. PLACE SALVAGED TOPSOIL, EROSION BLANKETS/MATTING, AND SEED/MULCH AS SOON AS POSSIBLE FOLLOWING COMPLETION OF FINE GRADING EFFORTS.
- EROSION CONTROLS SHALL NOT BE REMOVED UNTIL SITE IS FULLY STABILIZED OR 70% VEGETATIVE COVER IS ESTABLISHED. CONTRACTOR IS RESPONSIBLE FOR REMOVAL OF SILT FENCE, TEMPORARY FENCING/PROTECTION, DITCH CHECKS, AND OTHER TEMPORARY CONTROLS, AND RESTORATION PRACTICES AS NECESSARY, TO THE SATISFACTION OF THE OWNER.

**2.2 STABILIZATION PRACTICES**

THE DATES WHEN MAJOR GRADING ACTIVITIES OCCUR, WHEN CONSTRUCTION ACTIVITIES TEMPORARILY OR PERMANENTLY CEASE ON A PORTION OF THE SITE, AND WHEN STABILIZATION MEASURES ARE INITIATED, SHALL BE RECORDED ON THE STABILIZATION SCHEDULE FOR MAJOR GRADING ACTIVITIES.

STABILIZATION MEASURES SHALL BE INITIATED AS SOON AS PRACTICABLE IN PORTIONS OF THE SITE WHERE CONSTRUCTION ACTIVITIES HAVE TEMPORARILY OR PERMANENTLY CEASED. NO MORE THAN SEVEN (7) DAYS SHALL PASS AFTER THE CONSTRUCTION ACTIVITY IN THAT PORTION OF THE SITE HAS PERMANENTLY CEASED UNLESS:

- THE INITIATION OF STABILIZATION MEASURES BY THE SEVENTH (7) DAY AFTER CONSTRUCTION ACTIVITY TEMPORARILY OR PERMANENTLY CEASE IS PRECLUDED BY SNOW COVER. IN THAT EVENT, STABILIZATION MEASURE SHALL BE INITIATED AS SOON AS PRACTICABLE.
- CONSTRUCTION ACTIVITY WILL RESUME ON A PORTION OF THE SITE WITHIN FOURTEEN (14) DAYS FROM WHEN ACTIVITIES CEASED. I.E. THE TOTAL TIME PERIOD THAT THE CONSTRUCTION ACTIVITY IS TEMPORARILY CEASED IS LESS THAN FOURTEEN (14) DAYS. IN THAT EVENT, STABILIZATION MEASURES DO NOT HAVE TO BE INITIATED ON THAT PORTION OF THE SITE BY THE SEVENTH (7) DAY AFTER CONSTRUCTION ACTIVITY HAS TEMPORARILY CEASED. SEE THE SOIL PROTECTION CHART PRESENTED IN THE CONSTRUCTION DOCUMENTS FOR RATES OF PERMANENT AND TEMPORARY VEGETATION.

STABILIZATION MEASURES SHALL BE DETERMINED BASED ON SITE CONDITIONS AT THE TIME CONSTRUCTION ACTIVITY HAS CEASED, INCLUDING BUT NOT LIMITED TO WEATHER CONDITIONS AND LENGTH OF TIME MEASURE MUST BE EFFECTIVE. THE FOLLOWING ARE ACCEPTABLE STABILIZATION MEASURES.

- PERMANENT SEEDING, IN ACCORDANCE WITH APPROVED LANDSCAPING PLAN
- TEMPORARY SEEDING MAY CONSIST OF SPRING OATS (100LS/ACRE) AND/OR WHEAT OR CEREAL RYE (150LS/ACRE)
- HYDRO-MULCHING WITH A TACKIFIER
- GEOTEXTILE EROSION MATTING
- SOODING

**2.3 STRUCTURAL PRACTICES**

THE FOLLOWING ARE DESCRIPTIONS OF STRUCTURAL PRACTICES TO BE IMPLEMENTED TO DIVERT FLOWS FROM EXPOSED SOILS, STORE FLOWS, OR OTHERWISE LIMIT THE DISCHARGE OF POLLUTANTS FROM EXPOSED AREAS OF THE SITE INCLUDING THE PROPOSED AND EXISTING WETLAND AREAS. SUCH PRACTICES COULD INCLUDE SILT FENCE, PROTECTION FENCE, CONSTRUCTION ENTRANCE, DITCH CHECK, EROSION CONTROL MATTING, DIVERSION BERMS/WALES, SEDIMENT TRAP, LEVER SPREADER, INLET PROTECTION, OUTLET PROTECTION, AND TEMPORARY OR PERMANENT SEDIMENT BASIN. THE FOLLOWING STRUCTURAL PRACTICES ARE TO BE UTILIZED DURING THIS PROJECT:

- SILT FENCE.** SHALL BE PLACED DOWN SLOPE OF DISTURBED AREAS OF THE CONSTRUCTION SITE AND AROUND THE PERIMETER OF THE TOPSOIL STOCKPILE. THIS INCLUDES PROTECTION OF EXISTING WETLAND AREAS TO BE MAINTAINED. SILT FENCE MAY ALSO BE USED AS A TEMPORARY CONTROL DEVICE WHERE SEDIMENTATION RUNOFF IS DISCOVERED.
- CONSTRUCTION ENTRANCE.** SHALL BE INSTALLED TO REDUCE SOIL EROSION POLLUTANTS FROM LEAVING THE SITE DURING CONSTRUCTION ACTIVITIES. IF THE CRUSHED STONE DOES NOT ADEQUATELY REMOVE MUD FROM VEHICLE TIRES, THEY SHALL BE HOSED OFF BEFORE ENTERING A PAVED ROADWAY. ANY SOIL DEPOSITED ON THE PUBLIC PAVED ROADWAY SHALL BE REMOVED IMMEDIATELY.
- DITCH CHECK (STRAW BALES)** SHALL BE INSTALLED IN DRAINAGE CHANNELS AS NEEDED.
- EROSION CONTROL MATTING** SHALL BE PLACED ON AREAS OR EMBANKMENTS HAVING SLOPES GREATER THAN OR EQUAL TO 3:1 V, BEFORE VEGETATION IS ESTABLISHED.
- DIVERSION BERM/SWALE** SHALL BE CONSTRUCTED TO DIVERT RUNOFF AROUND THE SITE AND TO DIVERT RUNOFF FROM THE DISTURBED AREA TO A SEDIMENT TRAP OR OTHER CONTROL. BERMS/SWALES SHALL BE STABILIZED WITH EQUIPMENT TRACKING AND TEMPORARY SEEDING.
- SEDIMENT TRAP/BASIN** SHALL BE CONSTRUCTED TO COLLECT RUNOFF AND RUNOFF FROM SITE DIVERSION BERMS/SWALES.
- INLET PROTECTION** SHALL BE INSTALLED AT STORMWATER DRAINAGE INLETS TO REDUCE SEDIMENT WITHIN STORM SEWER CONVEYANCE FEATURES.
- OUTLET SCOUR PROTECTION** SHALL BE INSTALLED AT STORMWATER DRAINAGE OUTLETS TO DIFFUSE FLOWS.

**3.0 ADDITIONAL PRACTICES**

ADDITIONAL POLLUTANT CONTROL MEASURES TO BE IMPLEMENTED DURING CONSTRUCTION ACTIVITIES SHALL INCLUDE, BUT NOT BE LIMITED TO THE FOLLOWING:

- CONSTRUCTION WASTE.** SHALL BE PROPERLY DISPOSED OF. THIS INCLUDES ALL CONSTRUCTION SITE WASTE MATERIAL, SANITARY WASTE, AND WASTE FROM VEHICLE TRACKING OF SEDIMENTS. THE CONTRACTOR SHALL ENSURE THAT NO MATERIAL WASTES OR HAZARDOUS BUILDING MATERIALS SHALL BE BURIED, DUMPED, BURNED, OR DISCHARGED TO THE WATERS OF THE STATE. VEHICLES HAULING MATERIAL AWAY FROM THE SITE SHALL BE COVERED WITH A TARP/AULIN TO PREVENT BLOWING DEBRIS.
- DUST CONTROL.** SHALL BE ACCOMPLISHED BY ONE OR MORE OF THE FOLLOWING METHODS:
  - COVERING 30% OR MORE OF THE SOIL SURFACE WITH A NON-ERODIBLE MATERIAL.
  - ROUGHENING (EQUIPMENT TRACKING) THE SOIL TO PRODUCE RIDGES PERPENDICULAR TO THE PREVAILING WIND. RIDGES SHALL BE AT LEAST SIX (6) INCHES IN HEIGHT.
  - FREQUENT WATERING OF EXCAVATION AND FILL AREAS.
  - PROVIDING GRAVEL OR PAVING AT ENTRANCE/EXIT DRIVES, PARKING AREAS AND TRANSIT PATHS.
  - STREET SWEEPING** SHALL BE PERFORMED TO IMMEDIATELY REMOVE ANY SEDIMENT TRACKED ON PAVEMENTS.

**4.0 EROSION AND SEDIMENT STRUCTURAL PRACTICE MAINTENANCE**

THE FOLLOWING MAINTENANCE PRACTICES SHALL BE USED TO MAINTAIN, IN GOOD AND EFFECTIVE OPERATING CONDITIONS, VEGETATION, EROSION AND SEDIMENT CONTROL MEASURES, AND OTHER PROTECTIVE MEASURES IDENTIFIED IN THIS PLAN UPON IDENTIFICATION, DEFICIENCIES IN STORMWATER CONTROLS SHALL BE ADDRESSED IMMEDIATELY. THE MAINTENANCE PROCEDURES FOR THIS DEVELOPMENT SHALL INCLUDE, BUT NOT BE LIMITED TO THE BELOW:

- SILT FENCE.** REPAIR OR REPLACE ANY DAMAGED FILTER FABRIC AND/OR STAKES. REMOVE ACCUMULATED SEDIMENT WHEN IT HAS REACHED ONE-HALF THE ABOVE GROUND HEIGHT OF THE FENCE.
- CONSTRUCTION ENTRANCE.** AS NEEDED, ADD STONE TO MAINTAIN CONSTRUCTION ENTRANCE DIMENSIONS AND EFFECTIVENESS.
- DITCH CHECK (STRAW BALES).** RE-SECURE STAKES; ADJUST OR REPOSITION BALES TO ADDRESS PROPER FLOW OF STORMWATER; AND REMOVE ACCUMULATED SEDIMENT WHEN IT HAS REACHED ONE-HALF THE HEIGHT OF THE BALES.
- EROSION CONTROL MATTING.** REPAIR MATTING IMMEDIATELY IF INSPECTION REVEALS BREACHED OR FAILED CONDITIONS. REPAIR AND RE-GRADE SOIL WHERE CHANNELIZATION HAS OCCURRED.
- DIVERSION BERM/SWALE.** REPLACE OR RE-COMPACT THE CONSTRUCTION MATERIALS AS NECESSARY.
- SEDIMENT TRAP.** REMOVE AND DISPOSE OF THE ACCUMULATED SEDIMENT WHEN IT HAS REACHED THE SEDIMENT STORAGE ELEVATION.
- INLET PROTECTION.** CLEAN, REPAIR OR REPLACE FILTER FABRIC AND/OR STONE WHEN CONTROL MEASURE IS CLOGGED. INLET FILTER BAGS SHALL BE REPLACED ONCE ONE-HALF FULL OF SEDIMENT.
- OUTLET PROTECTION.** CLEAN, REPAIR OR REPLACE FILTER FABRIC, TIE REINFORCEMENT MATTING AND/OR STONE WHEN CONTROL MEASURE IS ONE-HALF FULL OF SEDIMENT.
- SEDIMENT BASIN.** AT THE END OF CONSTRUCTION, CONTRACTOR SHALL REMOVE AND DISPOSE OF THE ACCUMULATED SEDIMENT AND RESTORE BASIN AREA TO INTENDED POST-CONSTRUCTION DESIGN GRADES.

**5.0 INSPECTION**

INSPECTIONS SHALL BE COMPLETED WITHIN TWENTY-FOUR (24) HOURS OF THE END OF A RAINFALL EVENT THAT IS ONE-HALF INCH OR GREATER OR EQUIVALENT SNOWFALL, OR AT A MINIMUM ONCE EVERY SEVEN (7) CALENDAR DAYS. INSPECTIONS SHALL BE UNDERTAKEN BY QUALIFIED PERSONNEL PROVIDED BY THE CONTRACTOR AND SHALL INCLUDE DISTURBED AREAS OF THE CONSTRUCTION SITE THAT HAVE NOT BEEN FINALLY STABILIZED. STRUCTURAL CONTROL MEASURES, AND LOCATIONS WHERE VEHICLES ENTER OR EXIT THE SITE. A STORMWATER POLLUTION PREVENTION PLAN INSPECTION REPORT SHALL BE COMPLETED AND ADDED TO THE SWPPP. RAINFALL SHALL BE RECORDED ON THE SWPPP RAINFALL LOG. CONTRACTOR SHALL IMMEDIATELY ARRANGE FOR REPAIR OR REPLACEMENT OF ANY DAMAGED OR DEFICIENT CONTROL MEASURES OBSERVED DURING THE INSPECTION.

QUALIFIED PERSONNEL MEANS A PERSON KNOWN/EDGEABLE IN THE PRINCIPLES AND PRACTICES OF EROSION AND SEDIMENT CONTROL MEASURES, SUCH AS A LICENSED PROFESSIONAL ENGINEER, A CERTIFIED PROFESSIONAL IN EROSION AND SEDIMENT CONTROL, A CERTIFIED EROSION SEDIMENT OR STORMWATER INSPECTOR, OR OTHER TRAINED INDIVIDUAL.

**6.0 SPILL PREVENTION**

**6.1 GENERAL MATERIAL MANAGEMENT PRACTICES**

THE GOOD HOUSEKEEPING PRACTICES LISTED BELOW SHALL BE FOLLOWED THROUGHOUT THE CONSTRUCTION PROJECT.

- CONTRACTOR SHALL STORE ONLY ENOUGH PRODUCTS REQUIRED TO COMPLETE THIS PROJECT.
- ALL MATERIAL SHALL BE STORED IN A NEAT, ORDERLY MANNER IN THEIR ORIGINAL CONTAINERS CONTAINING MANUFACTURER'S LABEL.
- MANUFACTURER'S RECOMMENDATIONS FOR PROPER USE AND DISPOSAL SHALL BE FOLLOWED.
- MATERIALS REQUIRED TO HAVE A MATERIAL SAFETY DATA SHEET (MSDS) SHALL HAVE A COPY STORED IN THE PROJECT'S MSDS DATA SHEET.

**6.2 SPILL CONTROL PRACTICES**

THE PRACTICES LISTED BELOW SHALL BE FOLLOWED FOR SPILL PREVENTION AND CLEANUP.

- MATERIALS AND EQUIPMENT NECESSARY FOR SPILL CLEANUP SHALL BE MAINTAINED ON-SITE.
- IMMEDIATELY UPON DISCOVERY, ALL SPILLS SHALL BE CLEANED UP ACCORDING TO THE MANUFACTURER'S RECOMMENDED METHODS.
- PERSONNEL CLEANING UP A SPILL SHALL USE PERSONAL PROTECTIVE EQUIPMENT.
- IMMEDIATELY UPON DISCOVERY, SPILLS OF TOXIC OR HAZARDOUS MATERIALS SHALL BE REPORTED TO THE OWNER AND GENERAL CONTRACTOR.
- NOTIFICATION AND REPORTING TO THE APPROPRIATE FEDERAL, STATE, AND LOCAL GOVERNMENT AGENCIES SHALL BE MADE AS REQUIRED.

**GENERAL INFORMATION:**

THIS STORMWATER POLLUTION PREVENTION PLAN (SWPPP) HAS BEEN DEVELOPED TO FULFILL ONE OF THE REQUIREMENTS OF THE GENERAL ENVIRONMENTAL PROTECTION AGENCY (EPA) NATIONAL POLLUTION DISCHARGE ELIMINATION SYSTEM (WISCONSIN POLLUTION DISCHARGE ELIMINATION SYSTEM WPDES) PERMIT NO. W-589199 FOR THE DISCHARGE OF STORMWATER ASSOCIATED WITH CONSTRUCTION PROJECTS DISTURBING ONE ACRE OR MORE. THE OWNER AND CONTRACTORS SHALL COMPLY WITH ALL REQUIREMENTS OF THE WPDES FOR ALL SUCH CONSTRUCTION PROJECTS. THE STORMWATER DISCHARGES ASSOCIATED WITH THE CONSTRUCTION ACTIVITY FROM THIS SITE ARE SUBJECT TO THE CONDITIONS AND REQUIREMENTS OF THE PERMITS.

THE EXECUTED OWNER CERTIFICATION AND THE CONTRACTOR CERTIFICATIONS SHALL BE KEPT ON-SITE WITH THE APPROVED PLANS.

**SWPPP AVAILABILITY:**

THE OWNER SHALL RETAIN A COPY OF THE SWPPP AT THE CONSTRUCTION SITE FROM THE DATE OF THE PROJECT INITIATION TO THE DATE OF FINAL STABILIZATION.

**KEEPING PLANS CURRENT:**

THE CONTRACTOR SHALL AMEND THE PLAN WHENEVER THERE IS A CHANGE IN DESIGN, CONSTRUCTION, OPERATION, OR MAINTENANCE, WHICH HAS A SIGNIFICANT EFFECT ON THE POTENTIAL FOR THE DISCHARGE OF POLLUTANTS TO THE WATERS OF THE STATE AND WHICH HAS NOT OTHERWISE BEEN ADDRESSED IN THE PLAN OR IF THE PLAN PROVES TO BE INEFFECTIVE IN ELIMINATING OR SIGNIFICANTLY CONTROLLING POLLUTANTS IN STORMWATER DISCHARGES ASSOCIATED WITH CONSTRUCTION AT THE SITE. IN ADDITION, THE PLAN SHALL BE AMENDED TO IDENTIFY ANY NEW CONTRACTOR AND/OR SUBCONTRACTOR THAT WILL IMPLEMENT A MEASURE OF THE PLAN. AMENDMENTS TO THE PLAN MAY BE REQUIRED BY THE MUNICIPALITY, OWNER, OR OTHER REVISING AGENCY. COPIES OF THE AMENDMENTS SHALL BE KEPT ON-SITE AS PART OF THE SWPPP.

**RETENTION OF RECORDS:**

THE OWNER SHALL RETAIN COPIES OF THIS AND ALL REPORTS AND NOTICES REQUIRED BY THIS PERMIT, AND RECORDS OF ALL DATA USED TO COMPLETE THE NOTICE OF INTENT TO BE COVERED BY THIS PERMIT, FOR A PERIOD OF AT LEAST THREE YEARS FROM THE DATE PERMIT COVERAGE EXPIRES OR IS TERMINATED. THIS PERIOD MAY BE EXTENDED BY THE REQUEST OF THE AGENCY AT ANY TIME. IN ADDITION, THE OWNER SHALL RETAIN A COPY OF THE PLAN REQUIRED BY THIS PERMIT AT THE CONSTRUCTION SITE FROM THE DATE OF PROJECT INITIATION TO THE DATE OF FINAL STABILIZATION.

A NOTICE OF INTENT (NOI) APPLICATION MUST BE COMPLETED AND INCORPORATED INTO THE SWPPP.

**WPDES NOTICE OF TERMINATION GUIDANCE:**

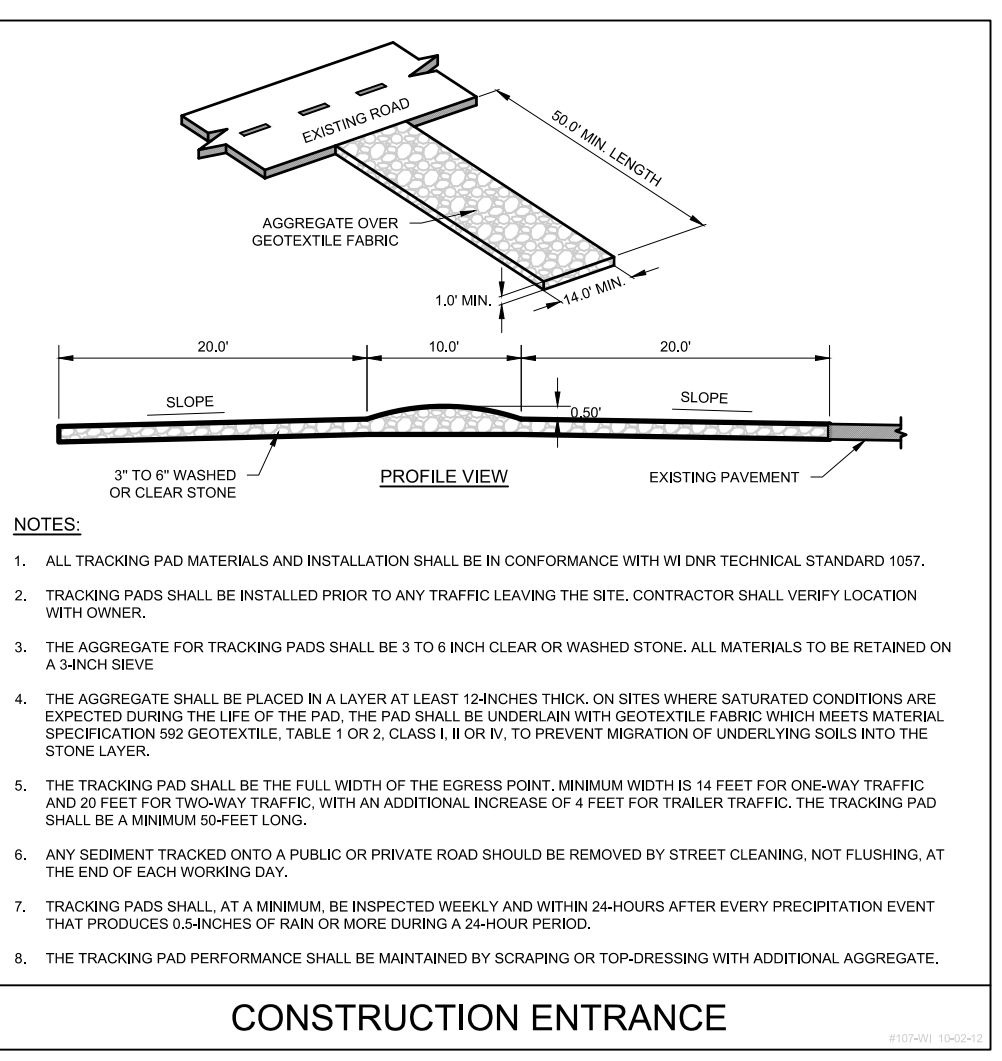
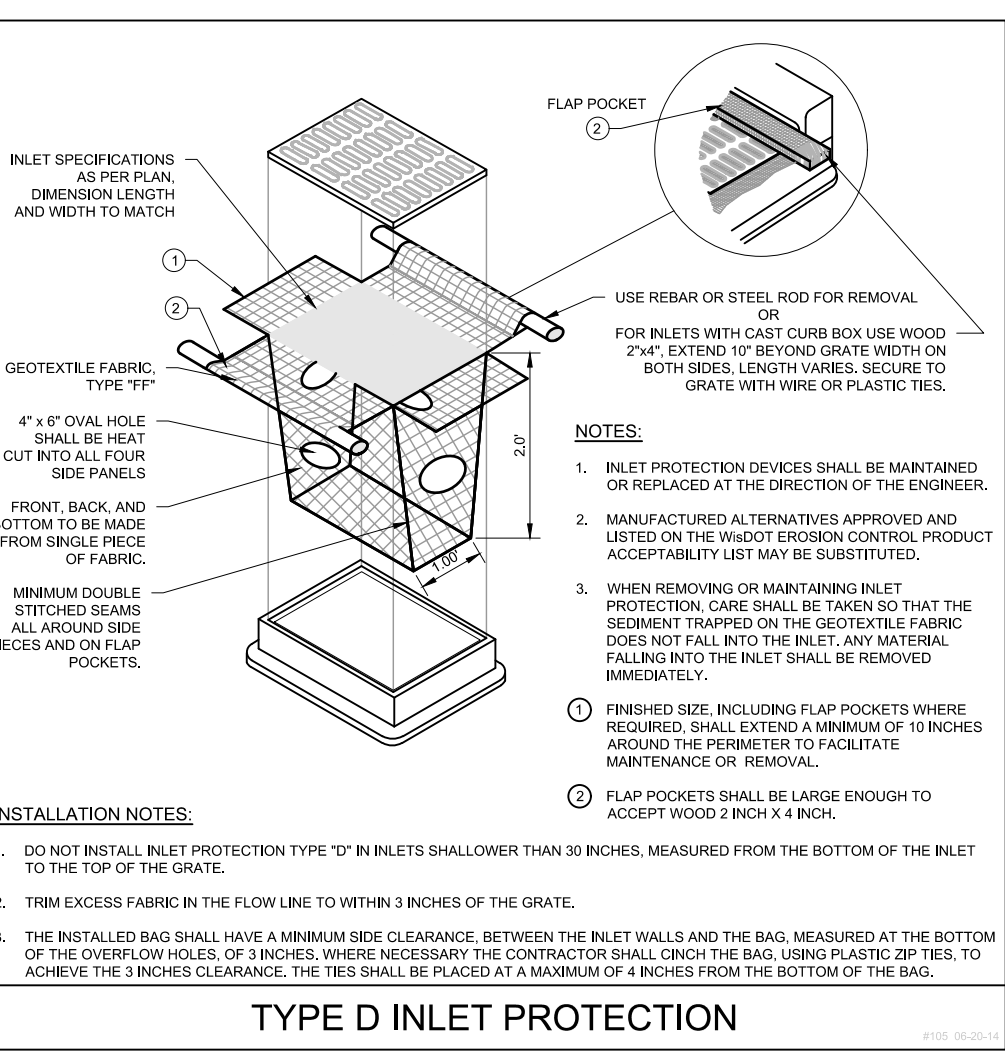
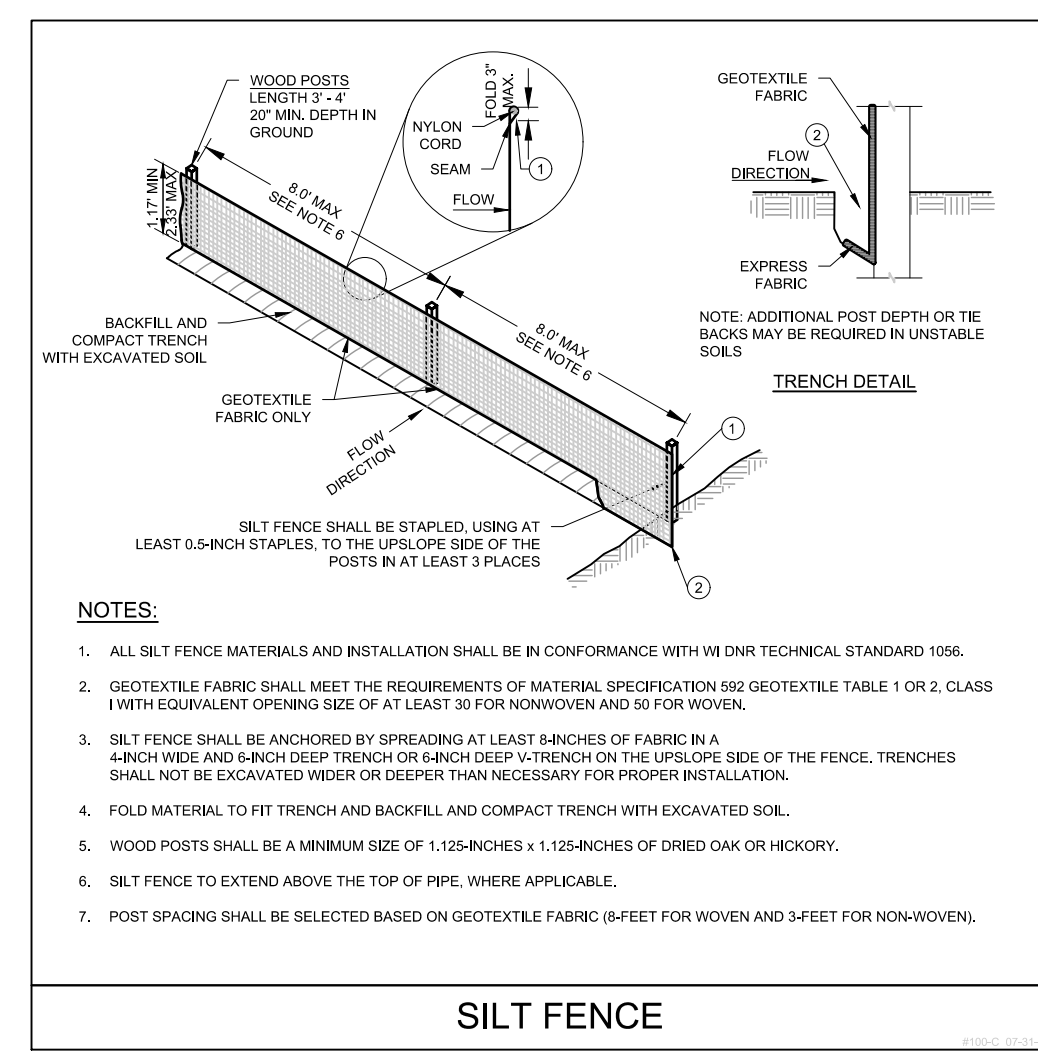
WHEN A SITE HAS BEEN FINALLY STABILIZED AND ALL STORMWATER DISCHARGES FROM CONSTRUCTION SITES THAT ARE AUTHORIZED BY THE PERMIT ARE ELIMINATED, THE OWNER OF THE FACILITY MUST SUBMIT A COMPLETED NOTICE OF TERMINATION THAT IS SIGNED IN ACCORDANCE WITH THE PERMIT. CONTRACTOR SHALL SUBMIT A COMPLETED NOTICE OF TERMINATION TO OWNER FOR EXECUTION PRIOR TO THEIR FINAL PAY APPLICATION REQUEST.

CONTROL MEASURE GROUP	CONTROL MEASURE	CONTROL MEASURE CHARACTERISTICS
VEGETATIVE SOIL COVER	TEMPORARY SEEDING	PROVIDES QUICK TEMPORARY COVER TO CONTROL EROSION WHEN PERMANENT SEEDING IS NOT DESIRED OR TIME OF YEAR IS INAPPROPRIATE.
	PERMANENT SEEDING	PROVIDES PERMANENT VEGETATIVE COVER TO CONTROL EROSION, FILTERS SEDIMENT FROM WATER, MAY BE PART OF FINAL LANDSCAPE PLAN.
NON VEGETATIVE SOIL COVER	AGGREGATE COVER	PROVIDES TEMPORARY COVER ON ROADS AND PARKING LOTS AND AREAS WHERE VEGETATION CANNOT BE ESTABLISHED. PREVENTS MUD FROM BEING PICKED UP AND TRANSPORTED OFF-SITE.
	PAVING	PROVIDES PERMANENT COVER ON PARKING LOTS AND ROADS OR OTHER AREAS WHERE VEGETATION CANNOT BE ESTABLISHED.
DIVERSIONS	DIVERSION BERM / SWALE	DIVERTS RUNOFF TO A SEDIMENT TRAP OR OTHER CONTROL.
ENCLOSED DRAINAGE	STORM SEWER	CONVEYS SEDIMENT LADEN WATER TO A SEDIMENT BASIN.
OUTLETS	APRON ENDWALL OR RIPRAP	PROTECTS DOWNSTREAM CHANNEL FROM HIGH VELOCITY OF FLOW DISCHARGING FROM STRUCTURE.
SEDIMENT BASINS	TEMPORARY SEDIMENT TRAP	CONSTRUCTED TO REMOVE SILTATION FROM RUNOFF FROM SITE DIVERSION BERMS/SWALES AND IN OVERLAND FLOOD ROUTE. CAN BE CONVERTED TO PERMANENT SEDIMENT BASIN.
	SILT FENCE	PLACED DOWN SLOPE OF DISTURBED AREA TO KEEP RUNOFF CONTAINED ON-SITE.
SEDIMENT FILTERS	INLET PROTECTION	INSTALLED IN OPEN GRATE STRUCTURES TO COLLECT SEDIMENT.
	DITCH CHECK	PLACED IN DRAINAGE CHANNELS TO FILTER SEDIMENT FROM RUNOFF.
MUD AND DUST CONTROL	CONSTRUCTION ENTRANCE	REDUCES SOIL EROSION POLLUTANTS BEING TRANSPORTED OFF-SITE.
	STREET SWEEPING	REDUCES POLLUTANTS TRACKED FROM CONSTRUCTION SITE.
	DUST CONTROL	PREVENTS DUST FROM LEAVING CONSTRUCTION SITE.

**STABILIZATION EFFECTIVENESS (TIME OF YEAR)**

STABILIZATION TYPE	STABILIZATION UTILIZATION PERIODS											
	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.	OCT.	NOV.	DEC.
PERMANENT SEEDING				A	*	*	*	*	*	*		
DORMANT SEEDING	B											B
TEMPORARY SEEDING			C	*	*	*	D	*	*	*		
SOODING			E	*	*	*	*	*	*	*		

A. KENTUCKY BLUEGRASS 90 LBS/ACRE MIXED WITH PERENNIAL RYEGRASS 30 LBS/ACRE.  
 B. KENTUCKY BLUEGRASS 135 LBS/ACRE MIXED WITH PERENNIAL RYEGRASS 45 LBS/ACRE + 2 TONS STRAW MULCH/ACRE.  
 C. SPRING OATS 100 LBS/ACRE.  
 D. WHEAT OR CEREAL RYE 150 LBS/ACRE.  
 E. SOO.  
 F. STRAW MULCH 2 TONS/ACRE.  
 \* IRRIGATION/WATERING REQUIRED TO SUPPORT ESTABLISHMENT AS NEEDED.

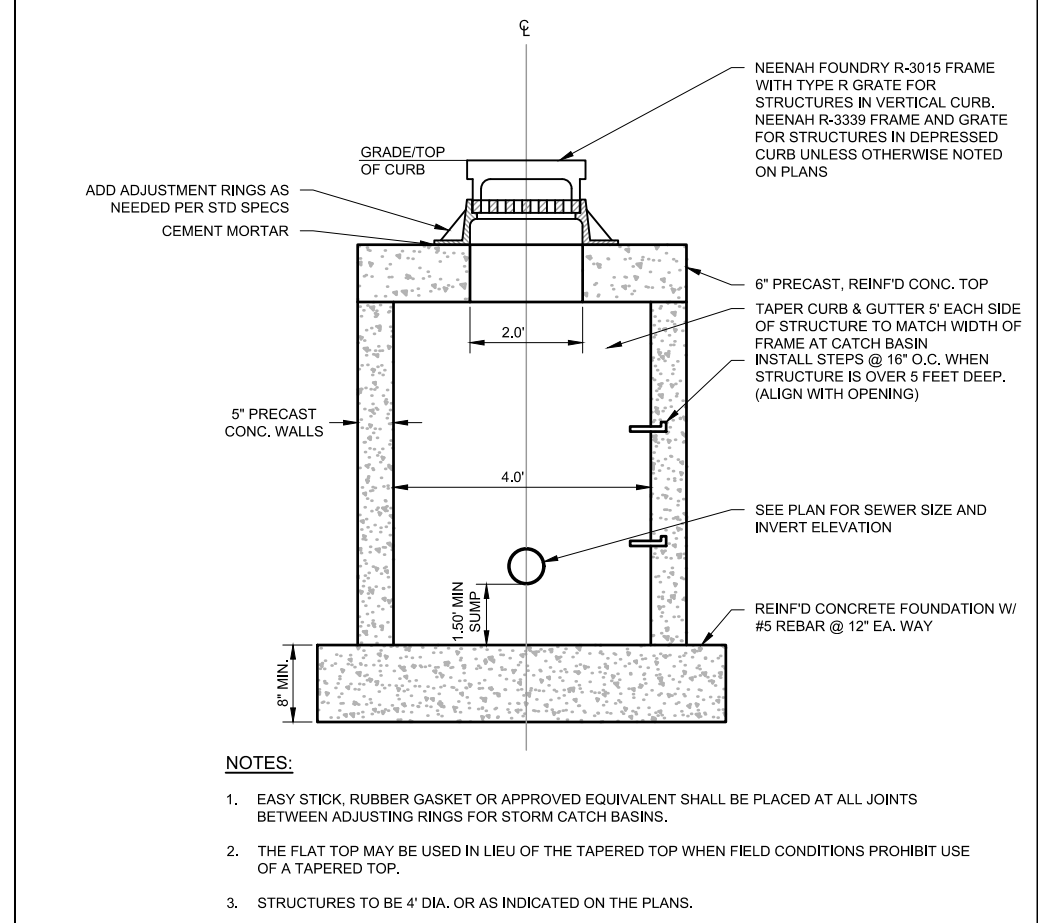


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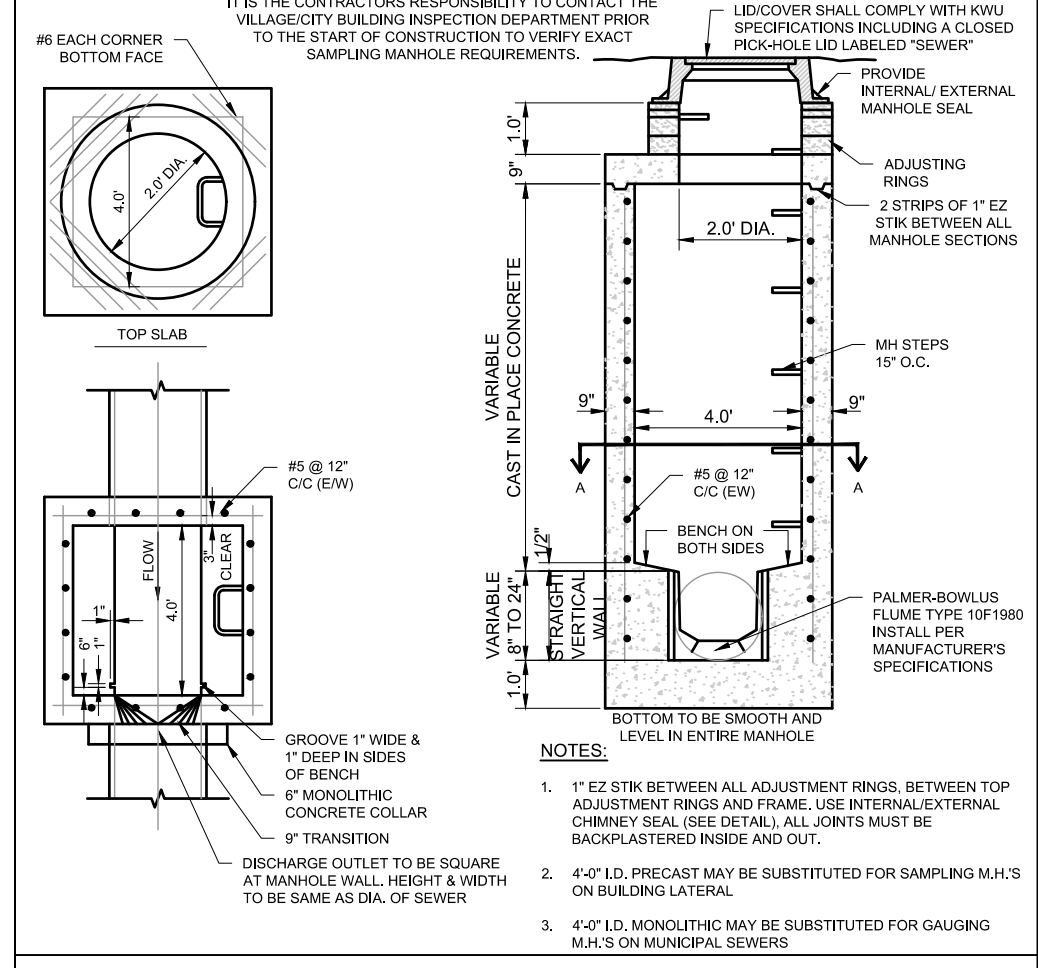
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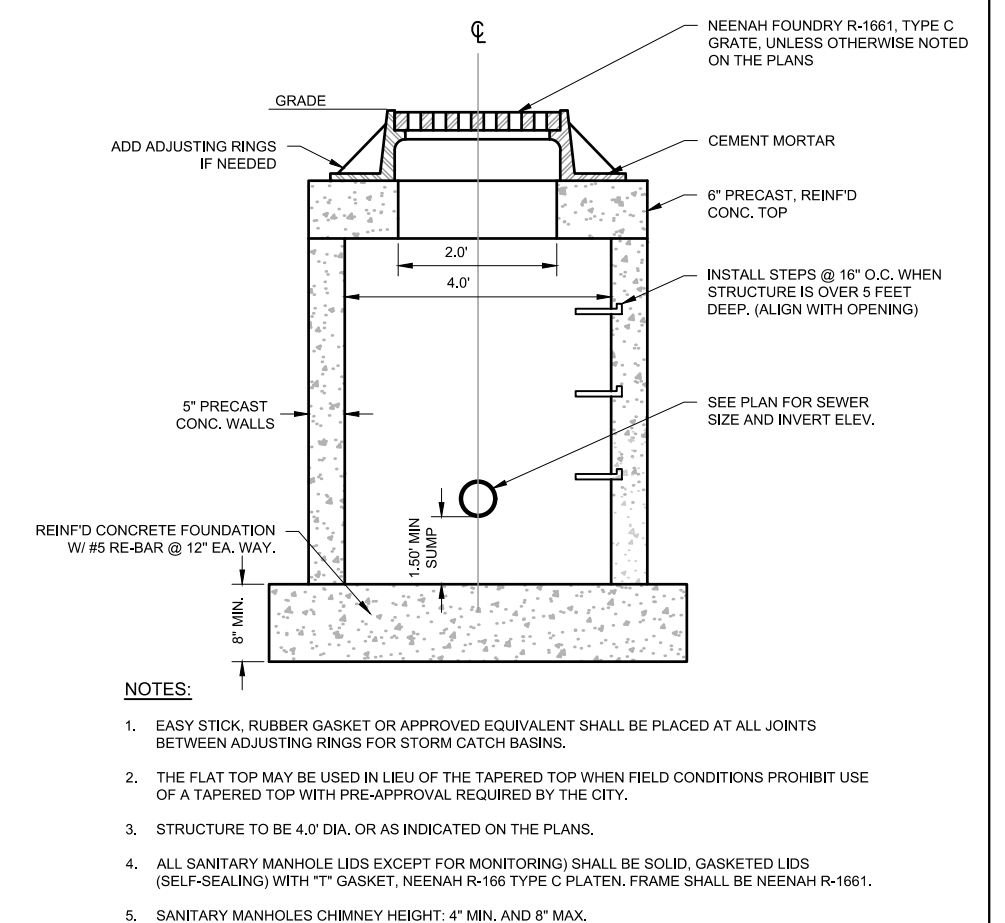
**CONSTRUCTION DETAILS**  
 N.T.S.



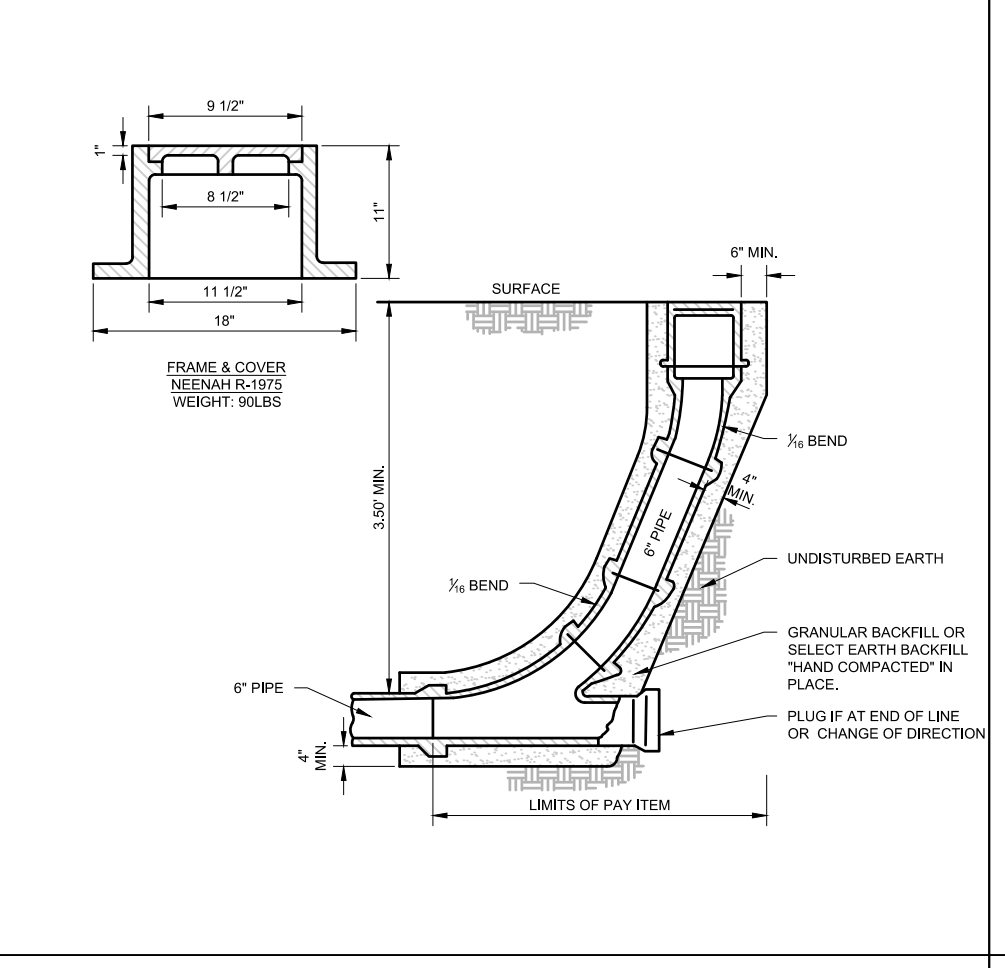
CATCH BASIN - CURB



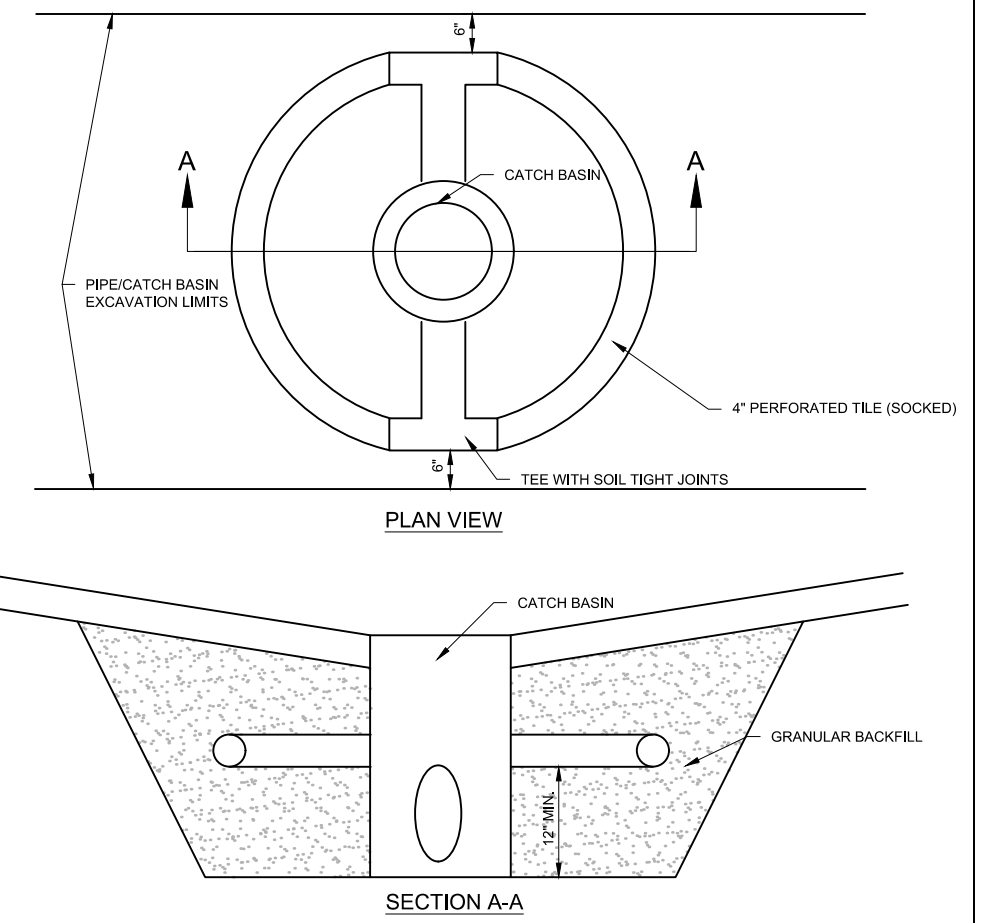
CATCH BASIN - CURB



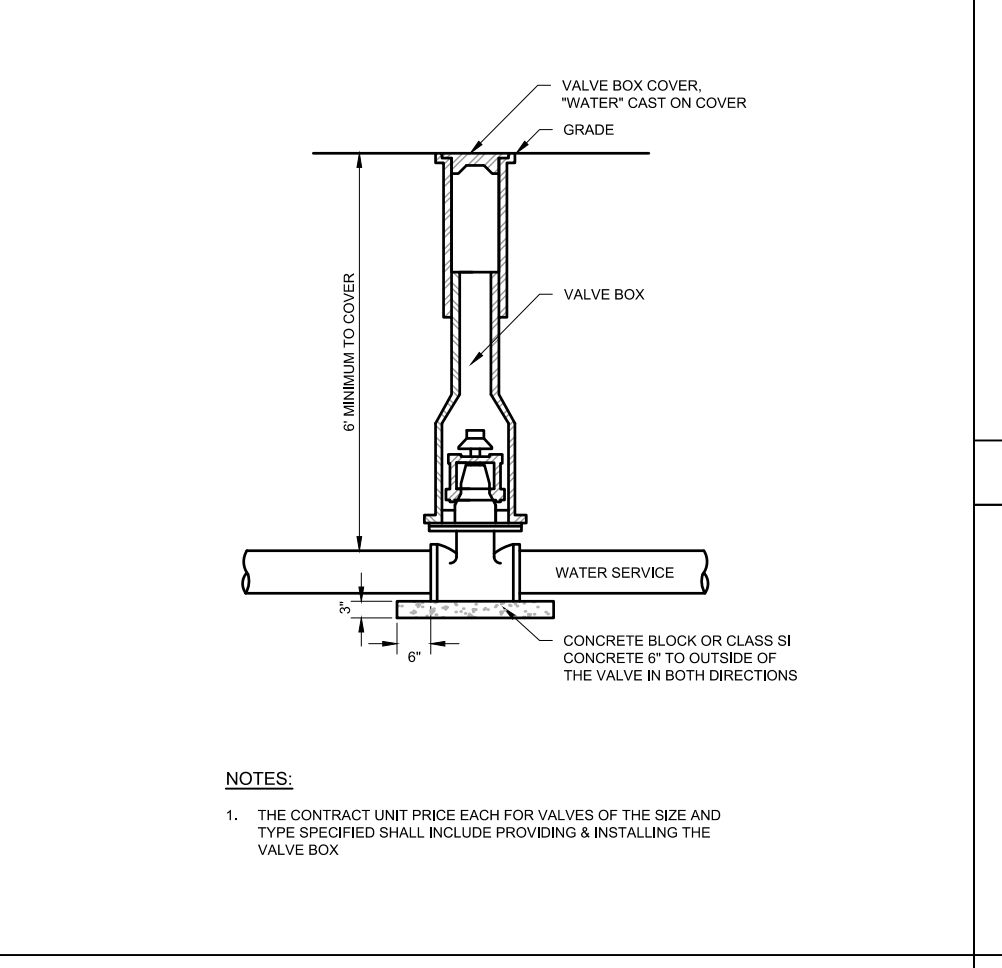
CATCH BASIN



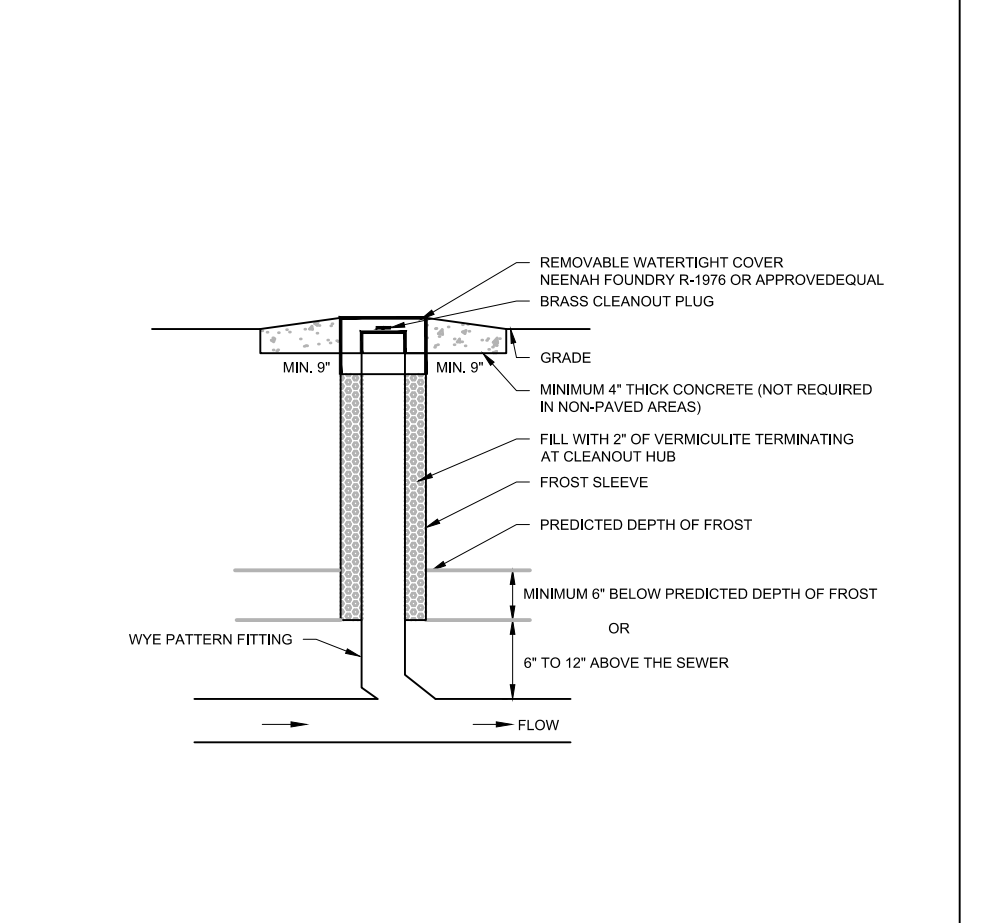
CATCH BASIN



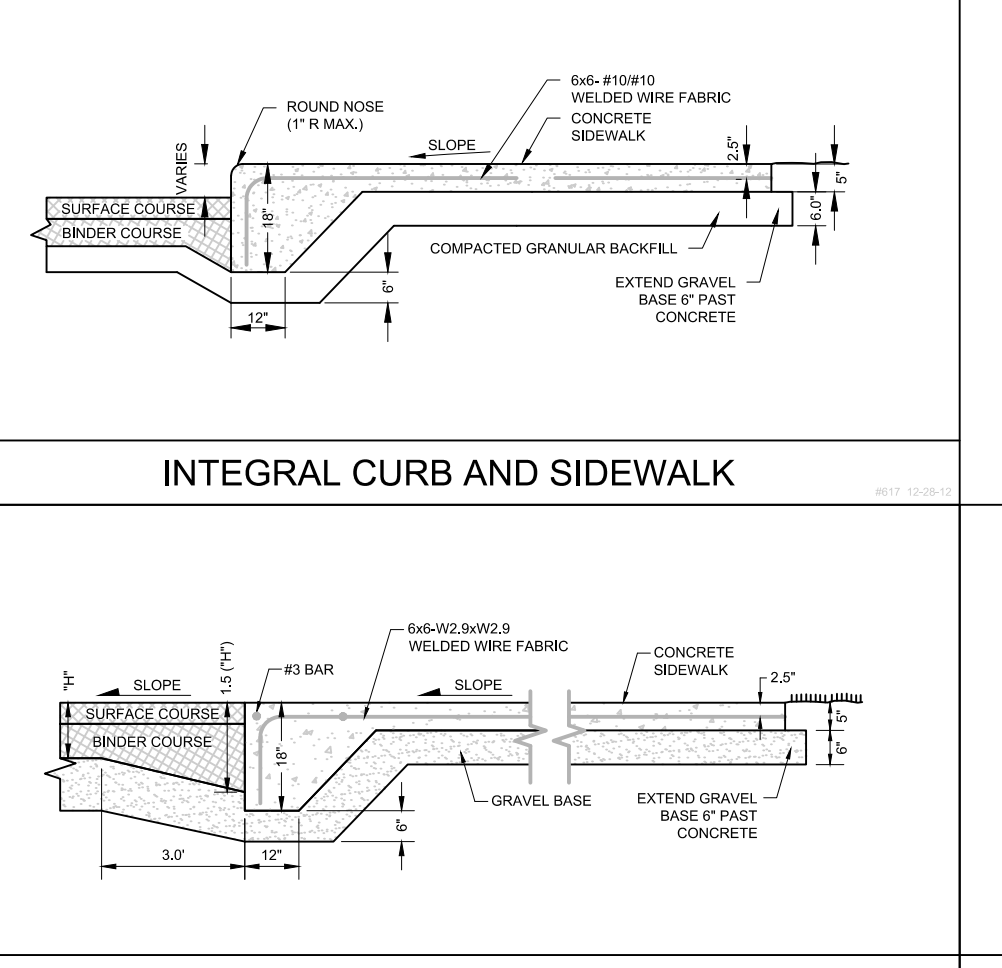
CATCH BASIN - UNDERDRAIN



CATCH BASIN - UNDERDRAIN



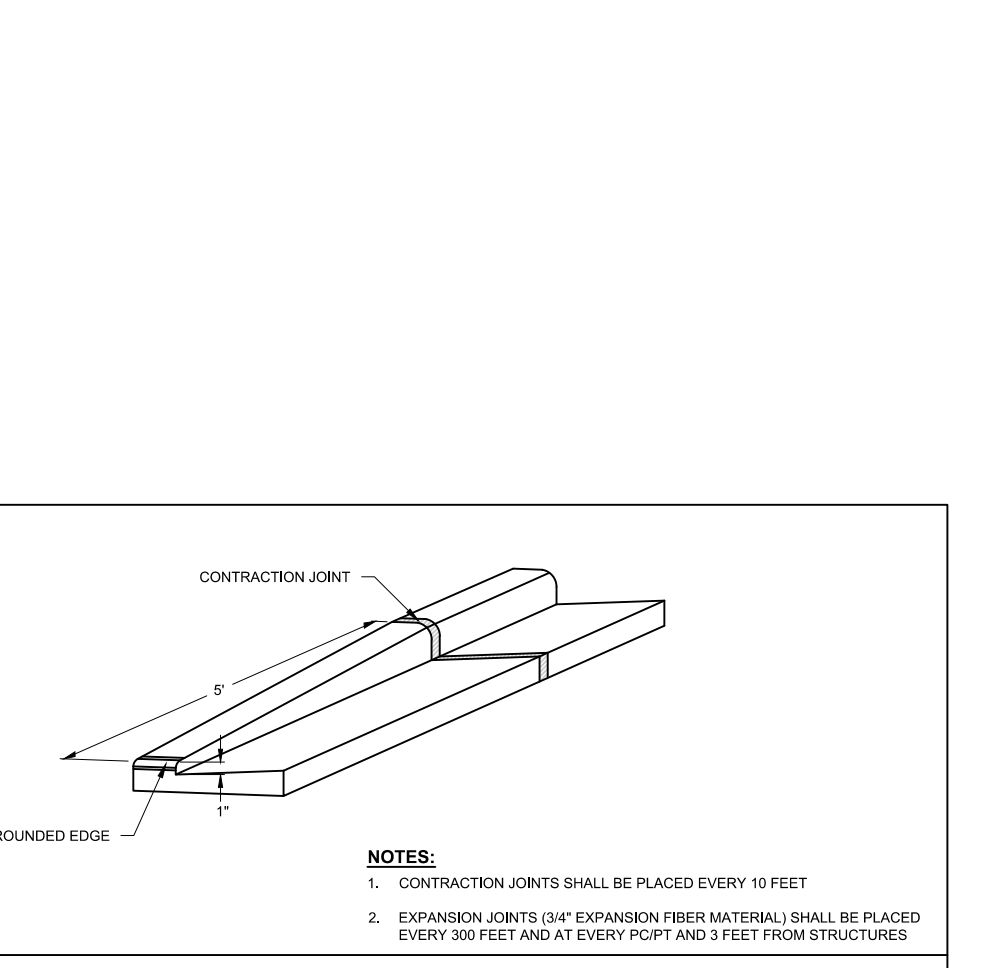
STORM CLEANOUT



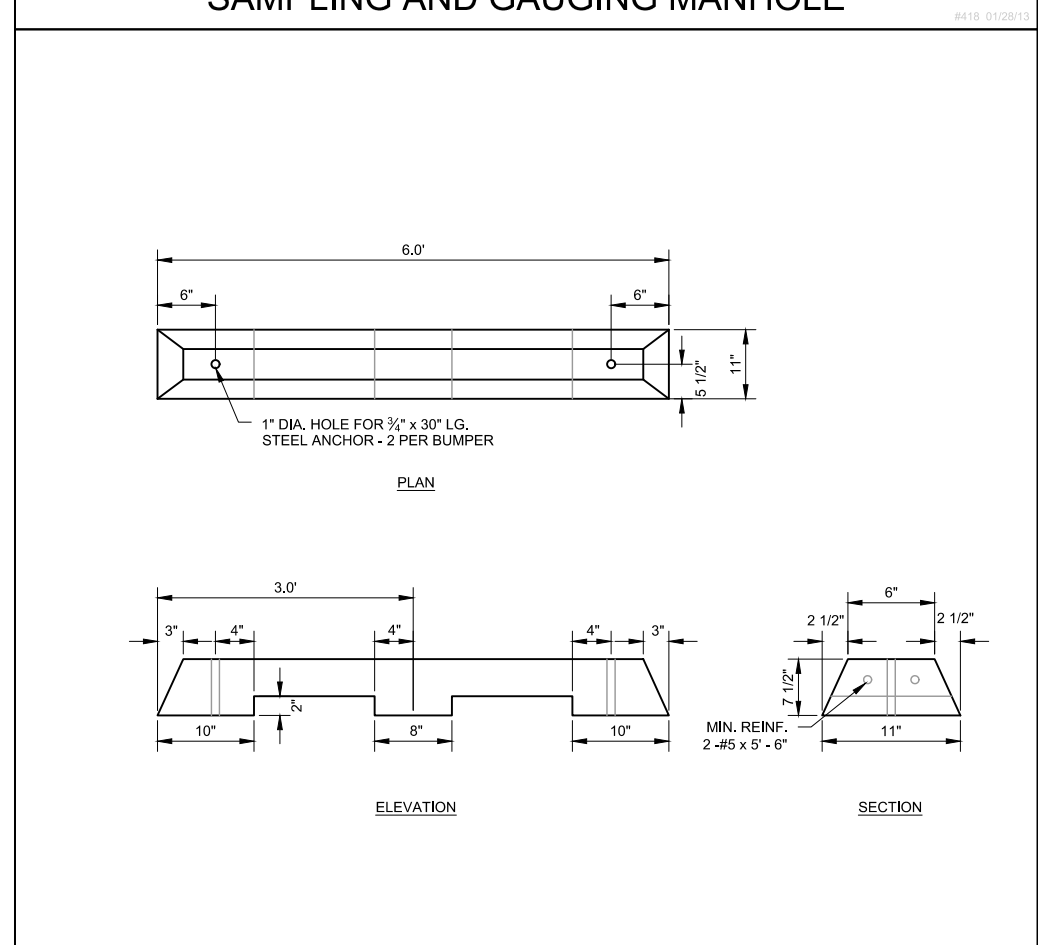
STORM CLEANOUT



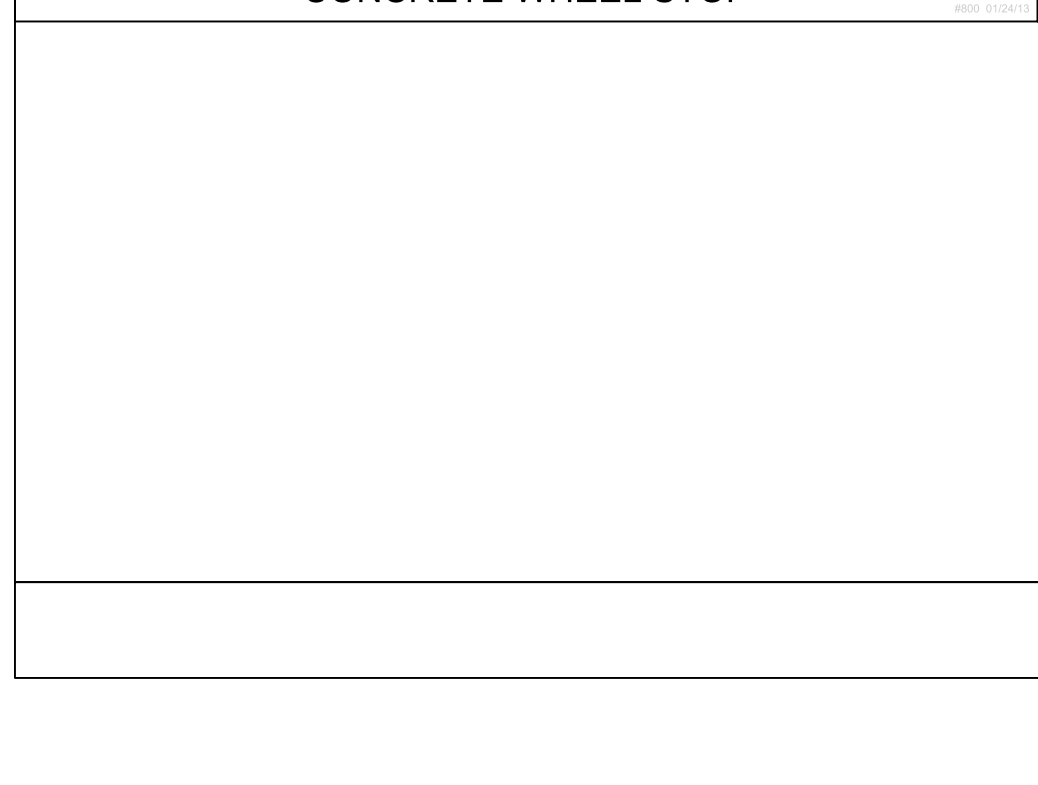
INTEGRAL CURB AND SIDEWALK



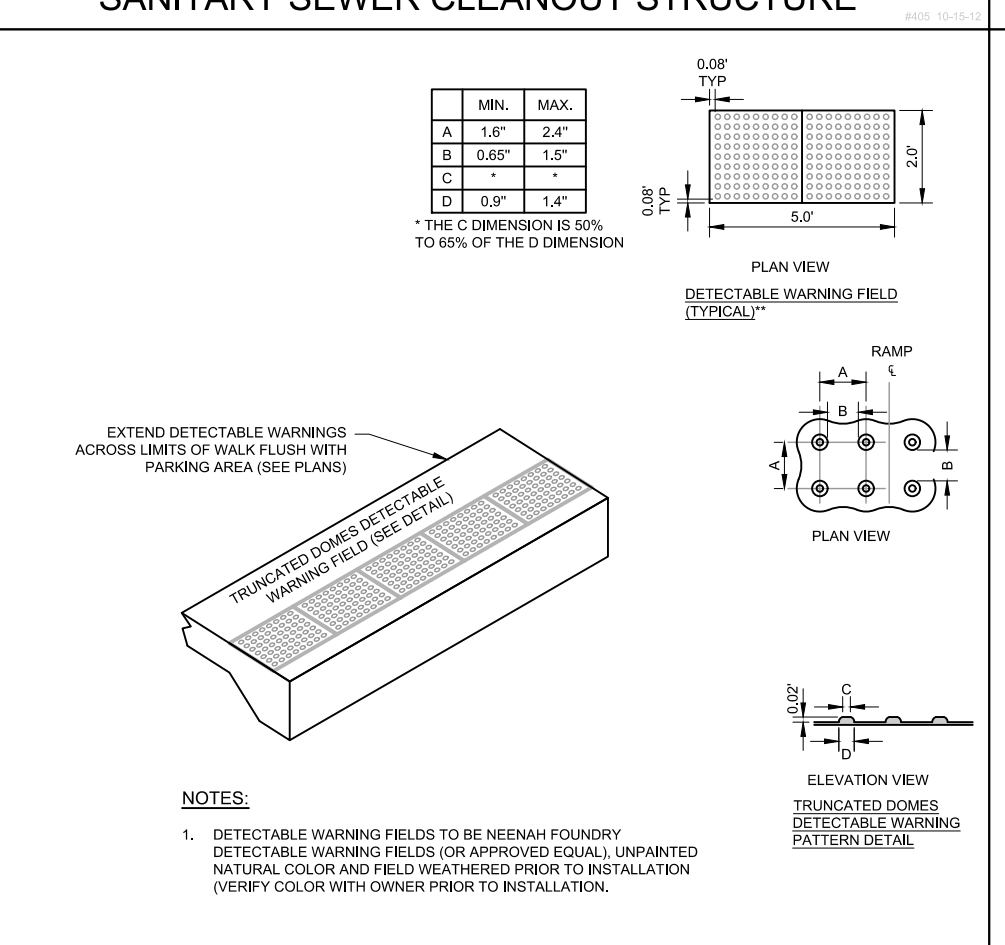
INTEGRAL CURB AND SIDEWALK



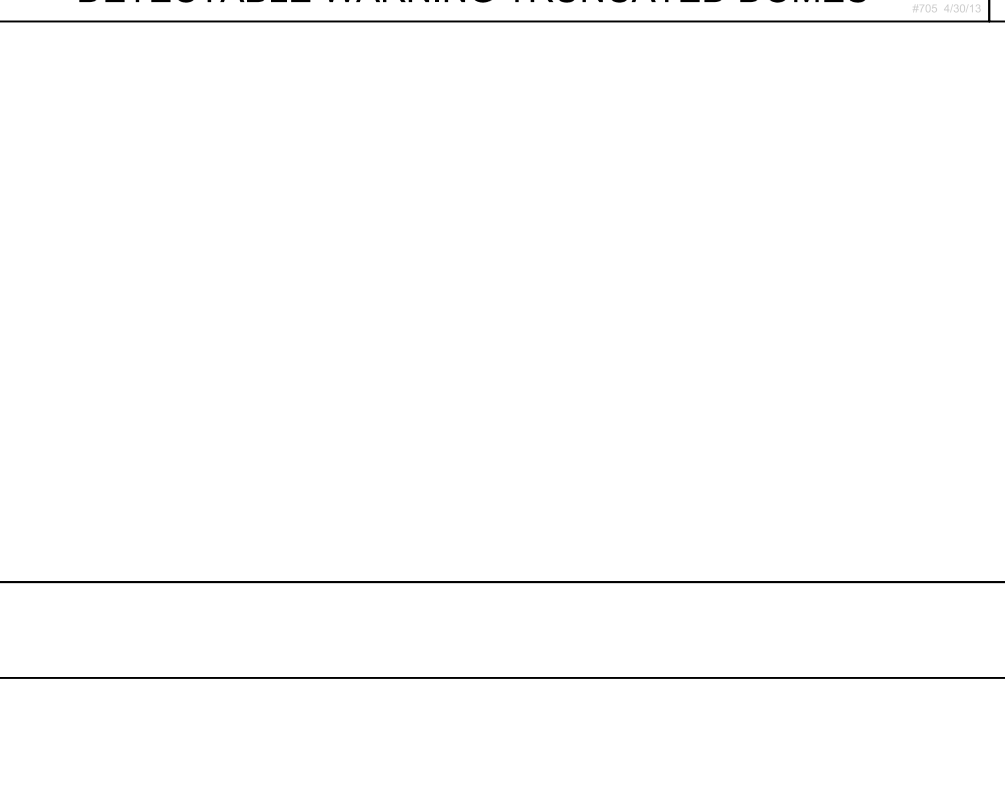
SAMPLING AND GAUGING MANHOLE



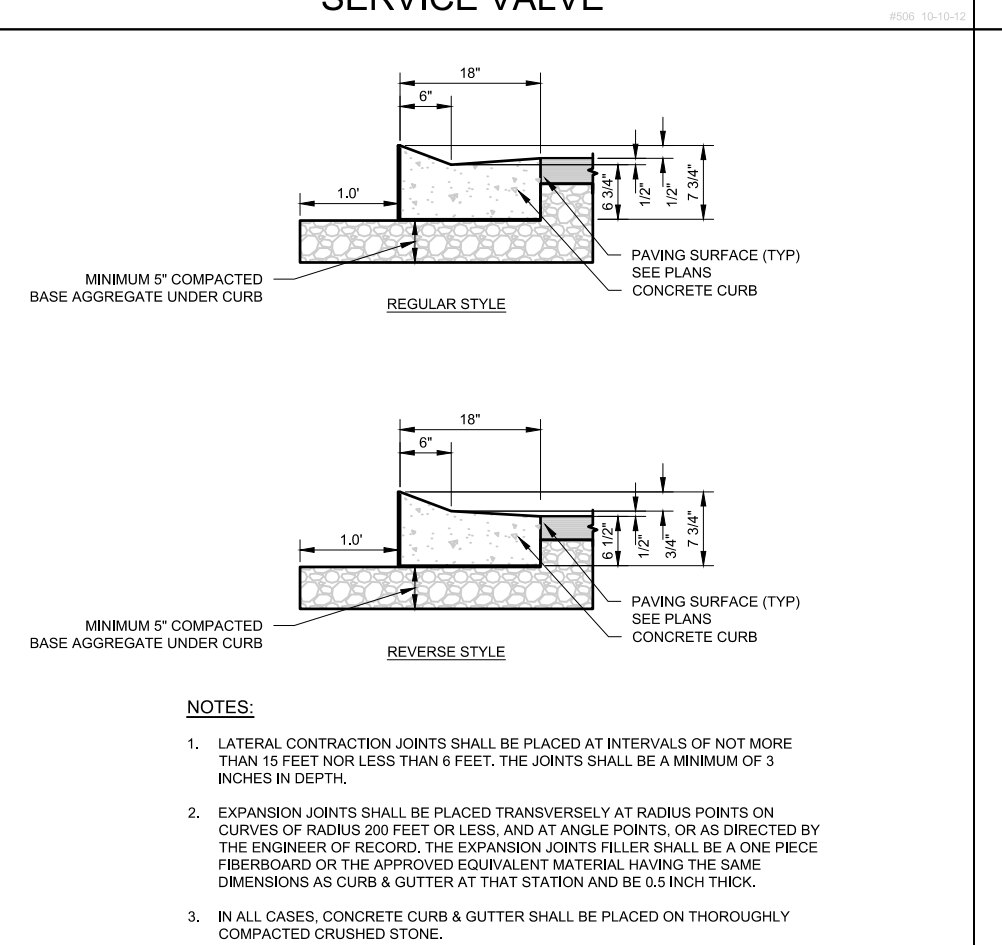
SAMPLING AND GAUGING MANHOLE



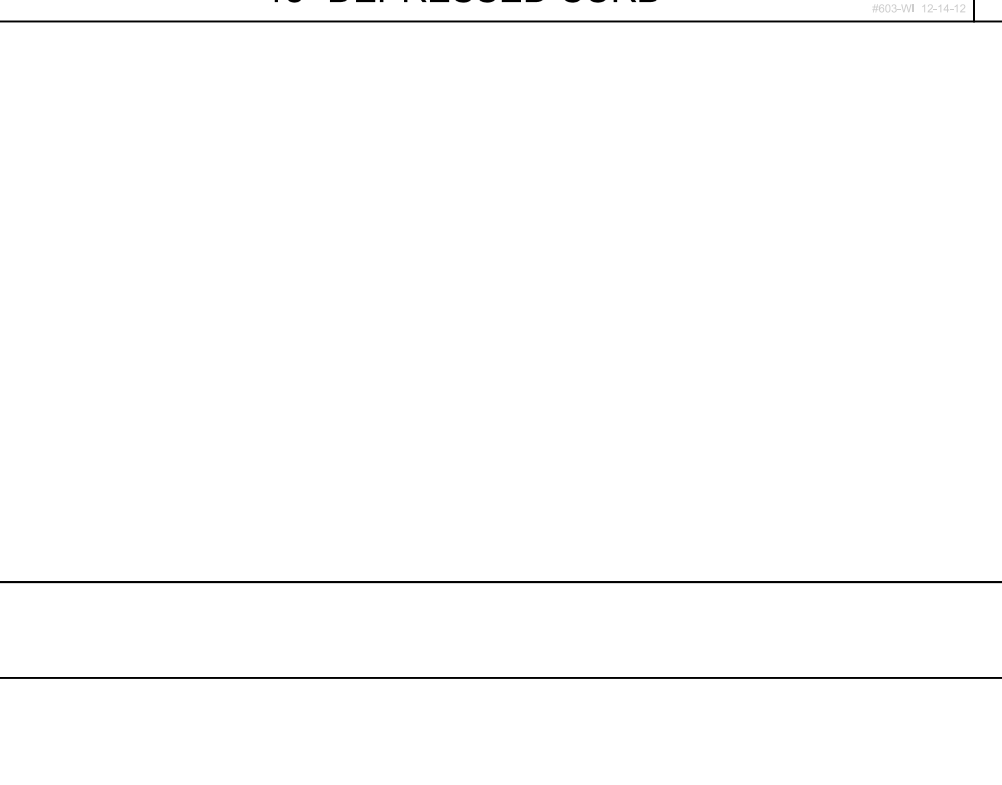
SANITARY SEWER CLEANOUT STRUCTURE



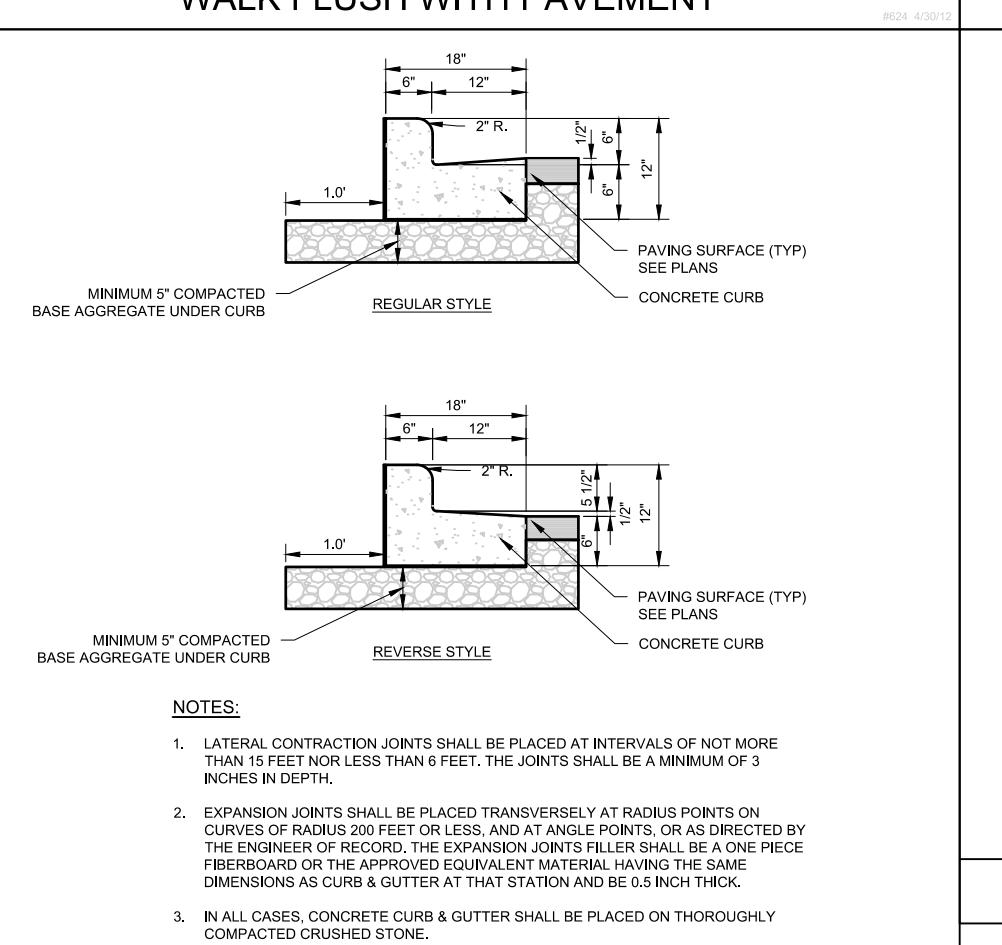
SANITARY SEWER CLEANOUT STRUCTURE



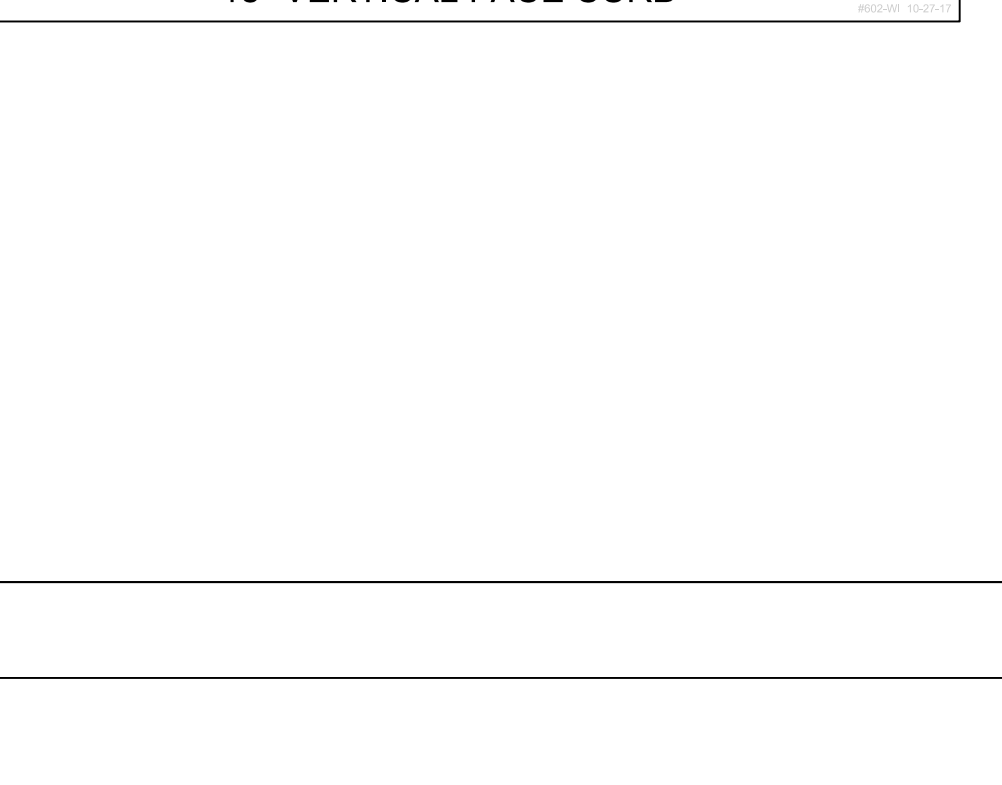
SERVICE VALVE



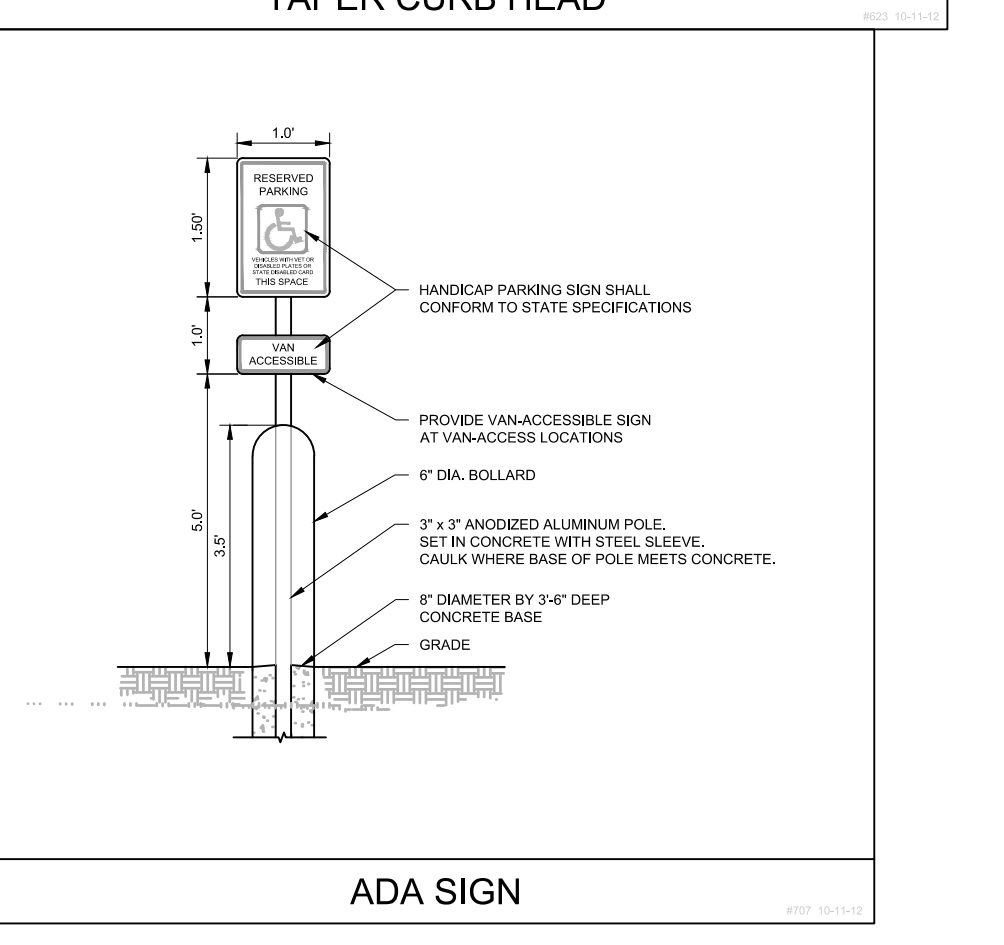
SERVICE VALVE



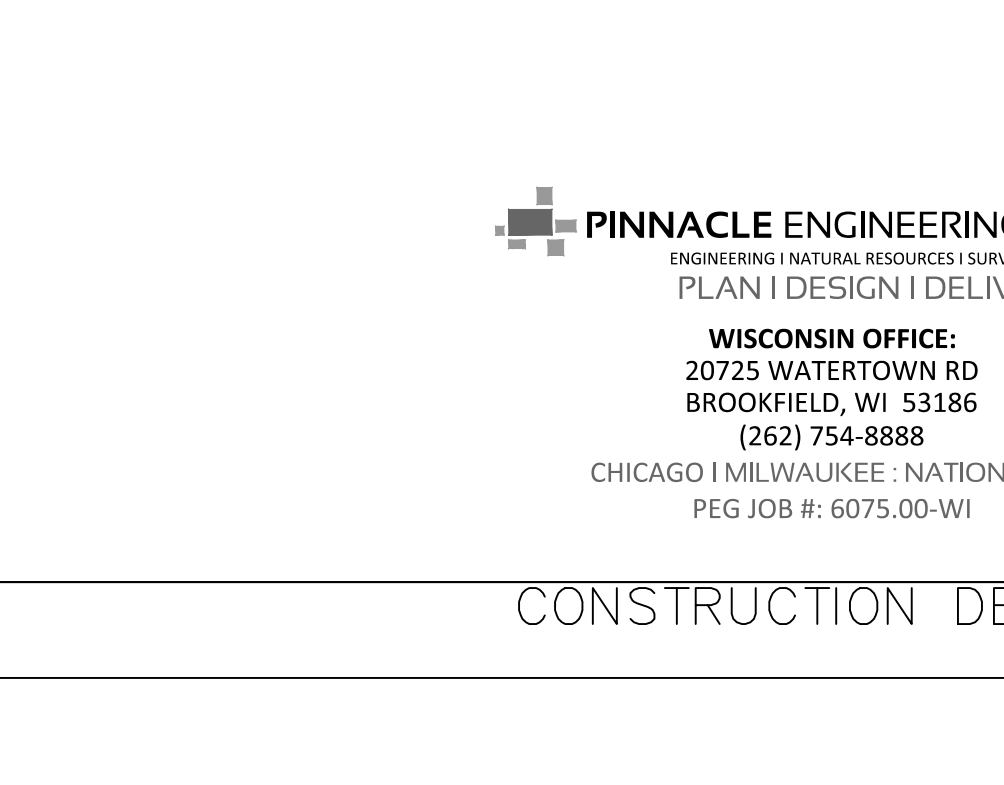
WALK FLUSH WITH PAVEMENT



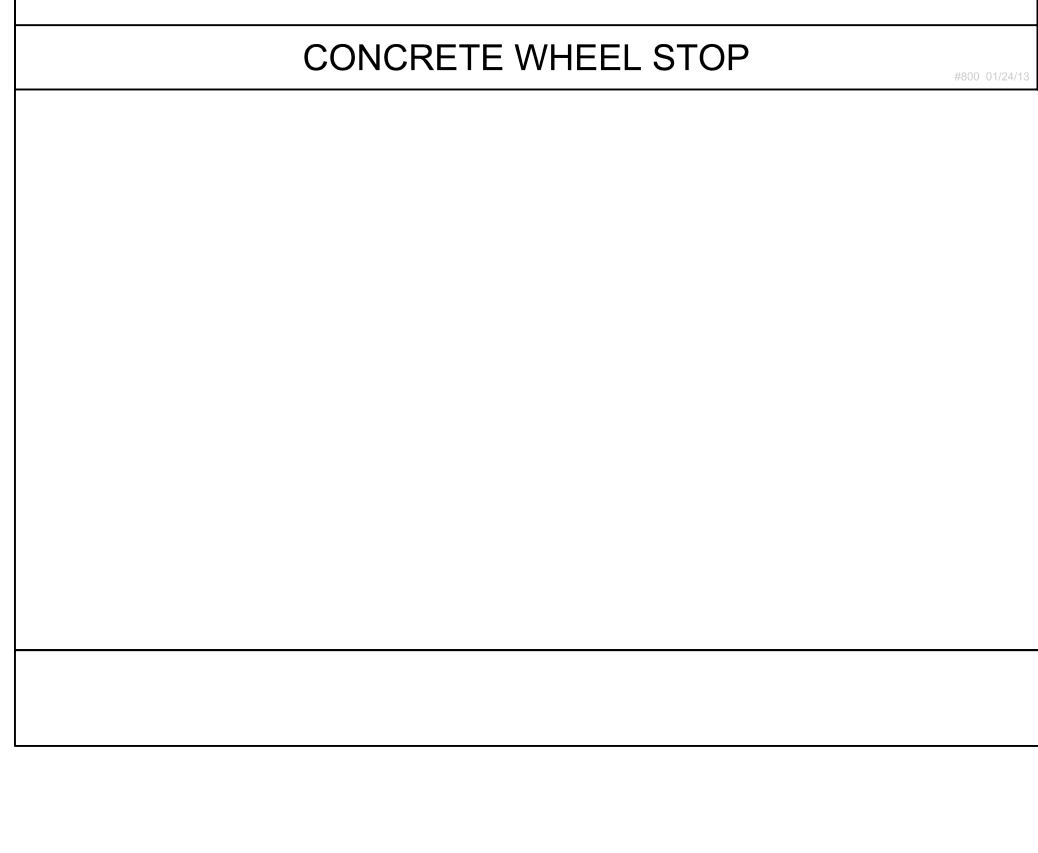
WALK FLUSH WITH PAVEMENT



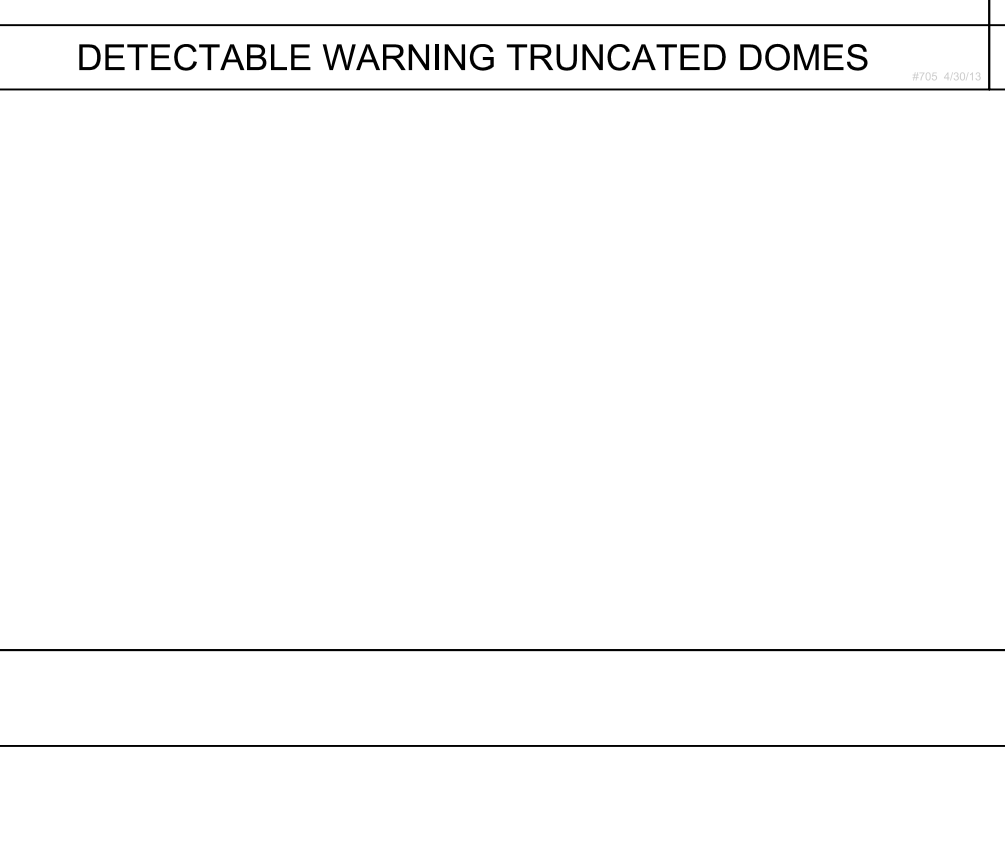
TAPER CURB HEAD



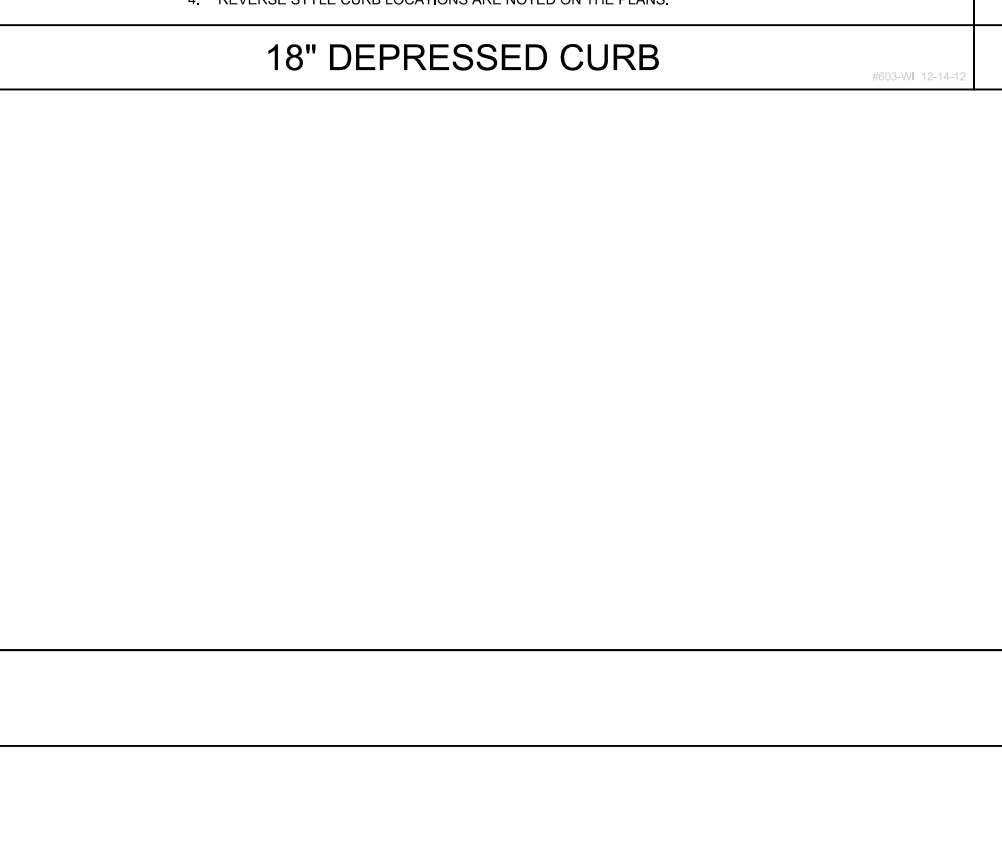
TAPER CURB HEAD



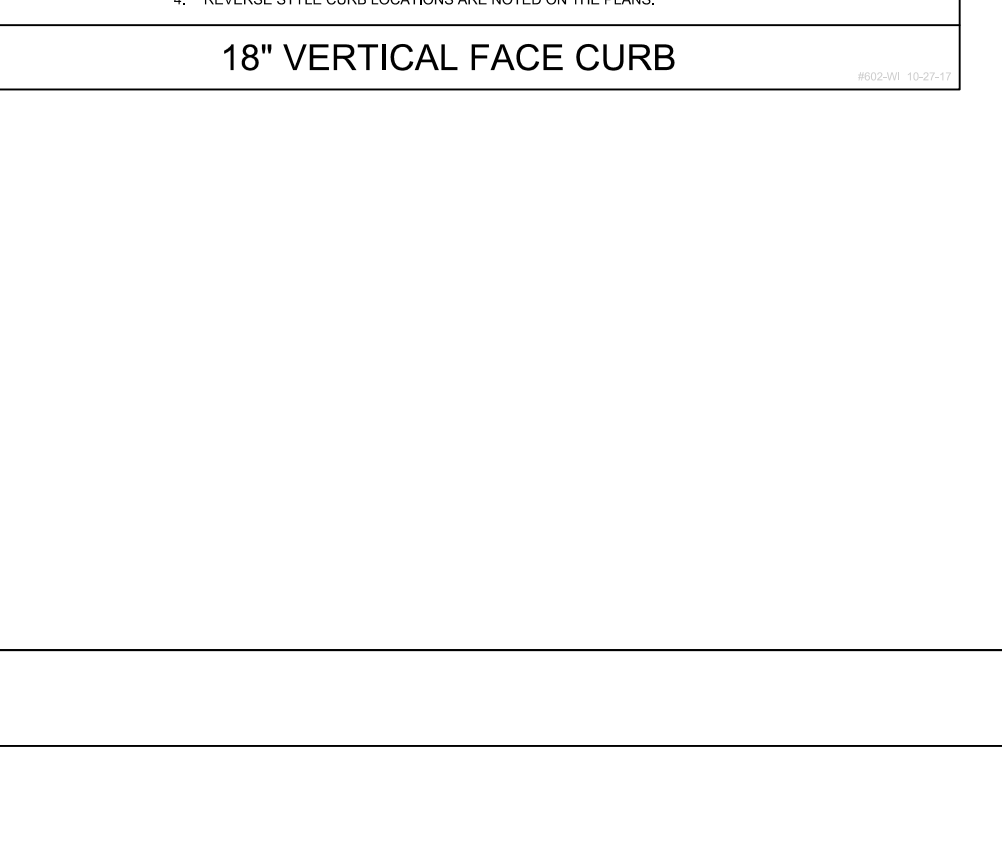
CONCRETE WHEEL STOP



DETECTABLE WARNING TRUNCATED DOMES



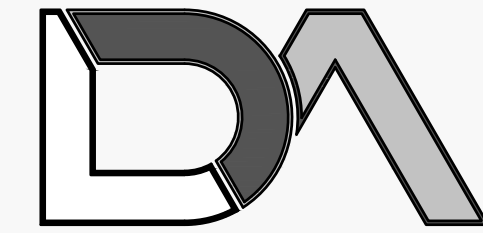
18" DEPRESSED CURB



18" VERTICAL FACE CURB



ADA SIGN



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Project Manager: AEV  
Job Number: 24-092

Additional Info

Project Name

NEW BUILDING FOR:  
STARBUCKS

101 SUNSET DR.  
WAUKESHA, WI 53186

Dates/Revisions

01/24/2025  
FINAL PLAN  
COMMISSION

02/17/2025  
PERMIT SET

Drawing Title  
CONSTRUCTION DETAILS

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02/17/2025	PERMIT SET	2

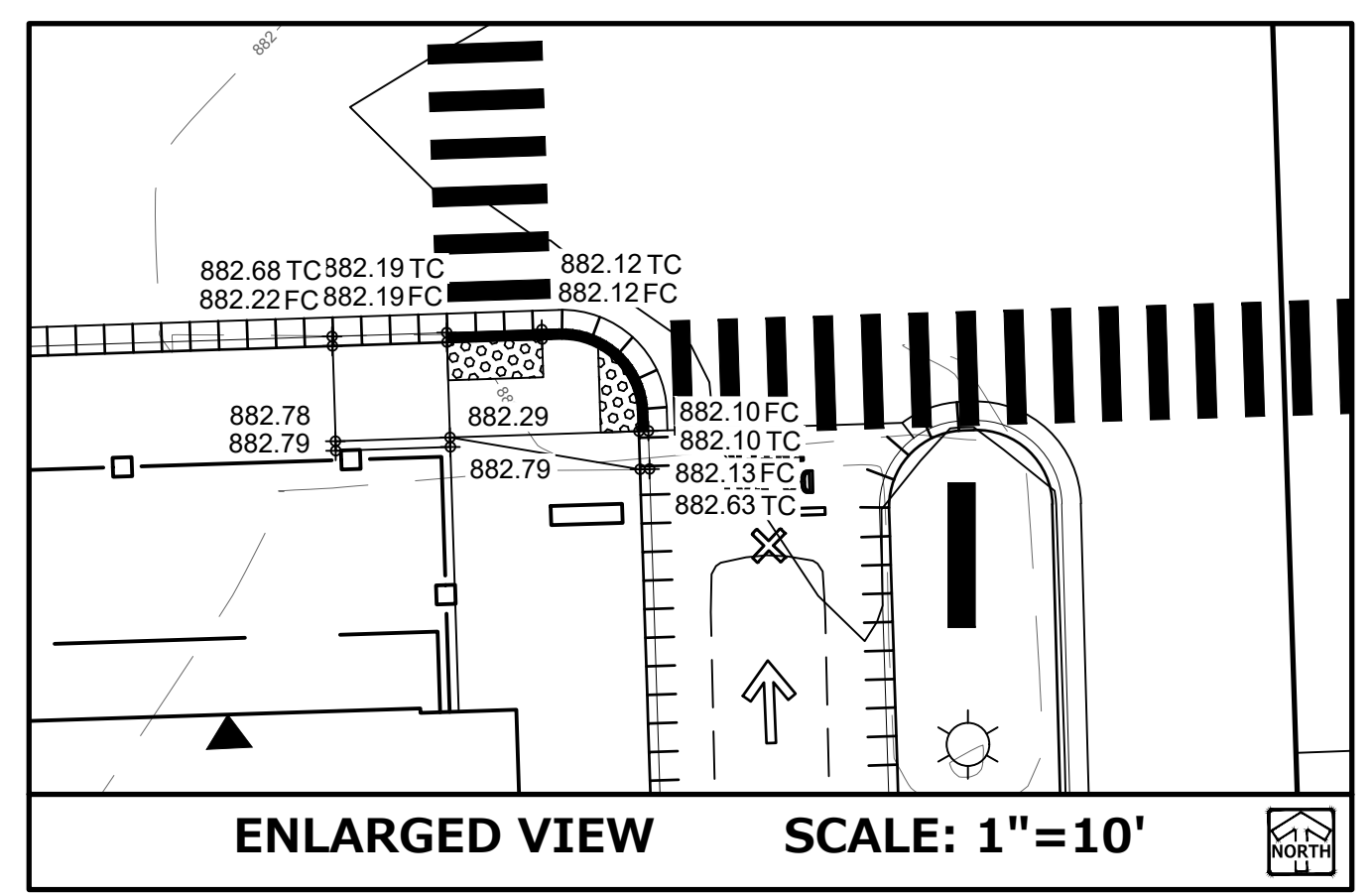
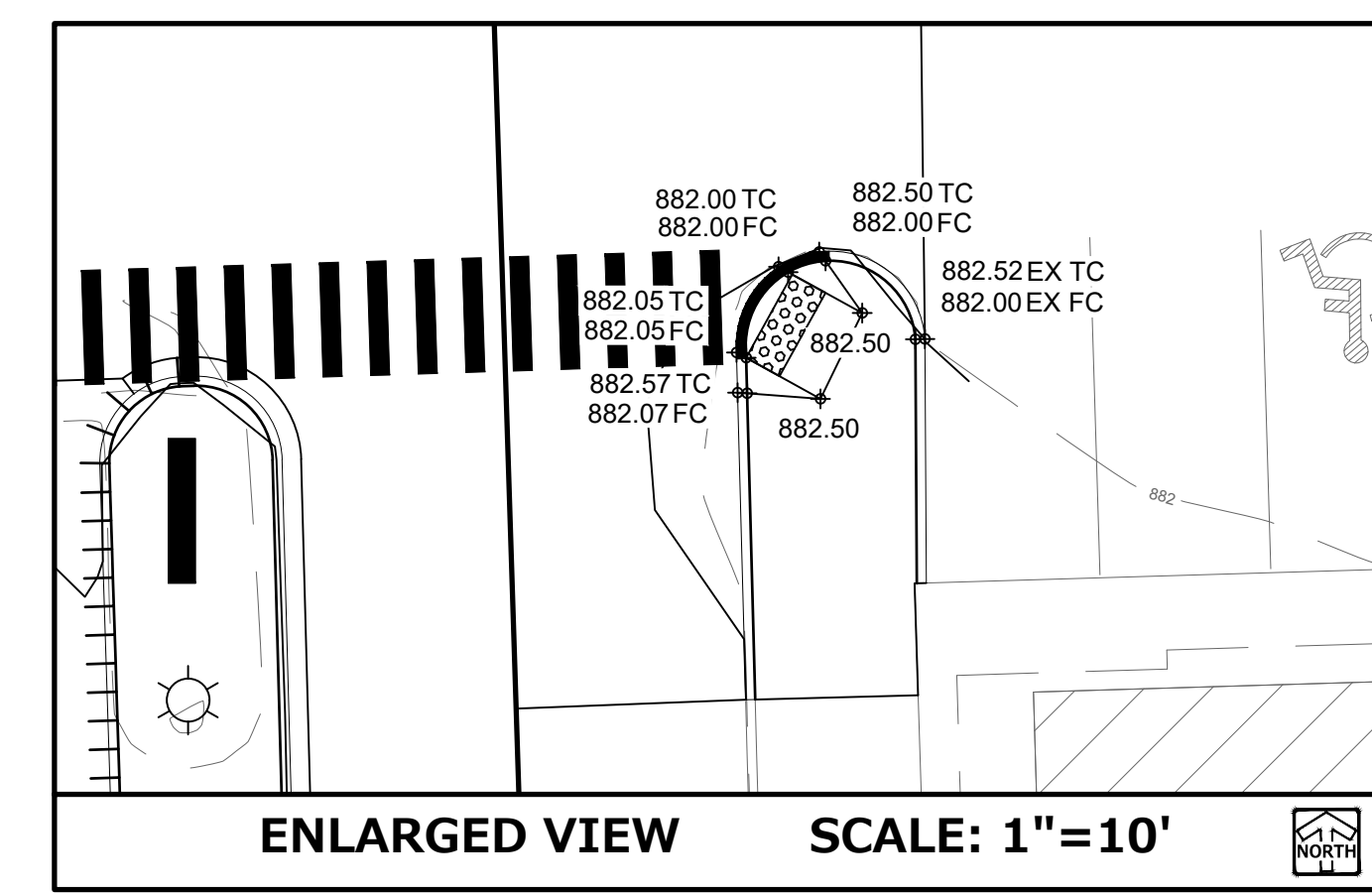
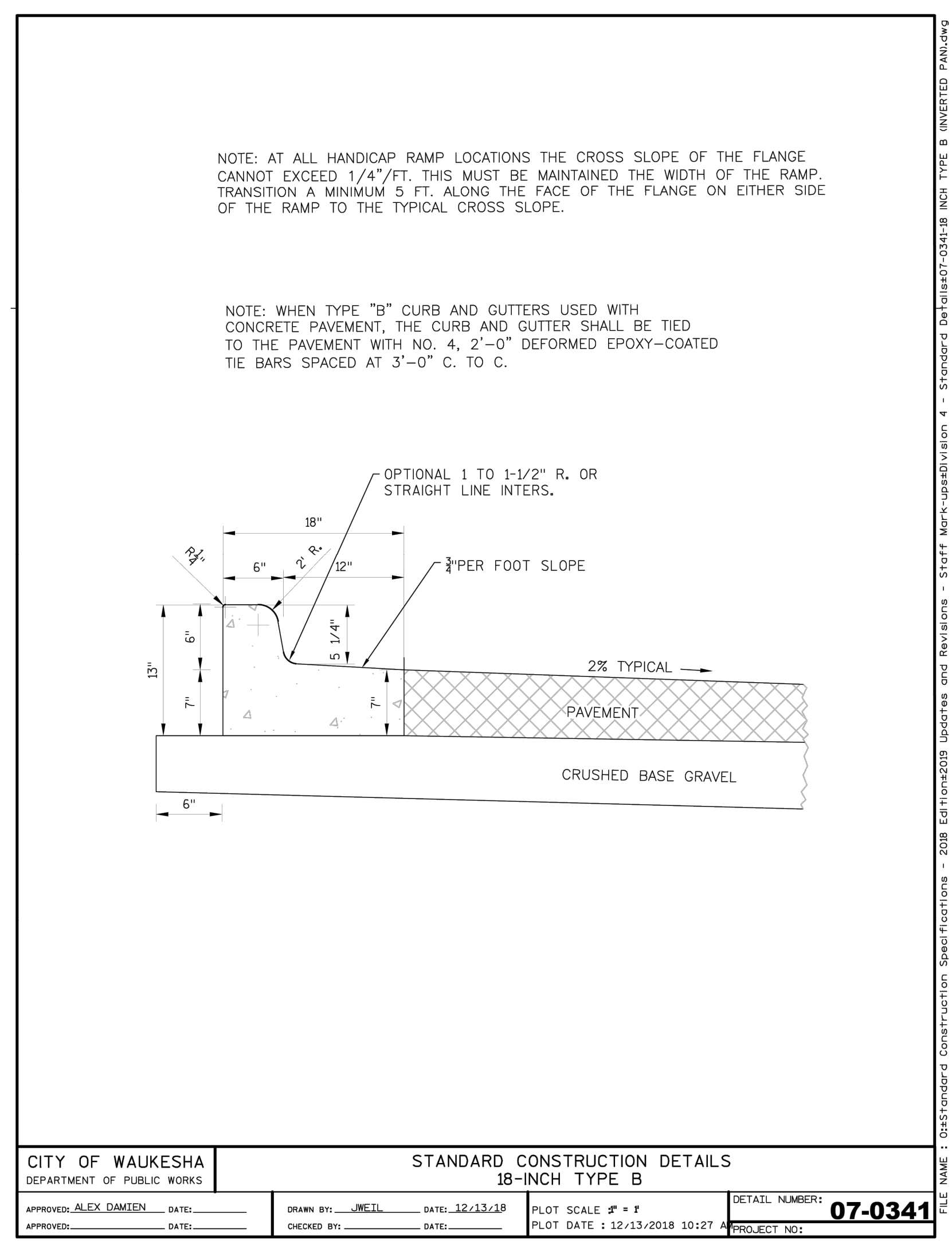
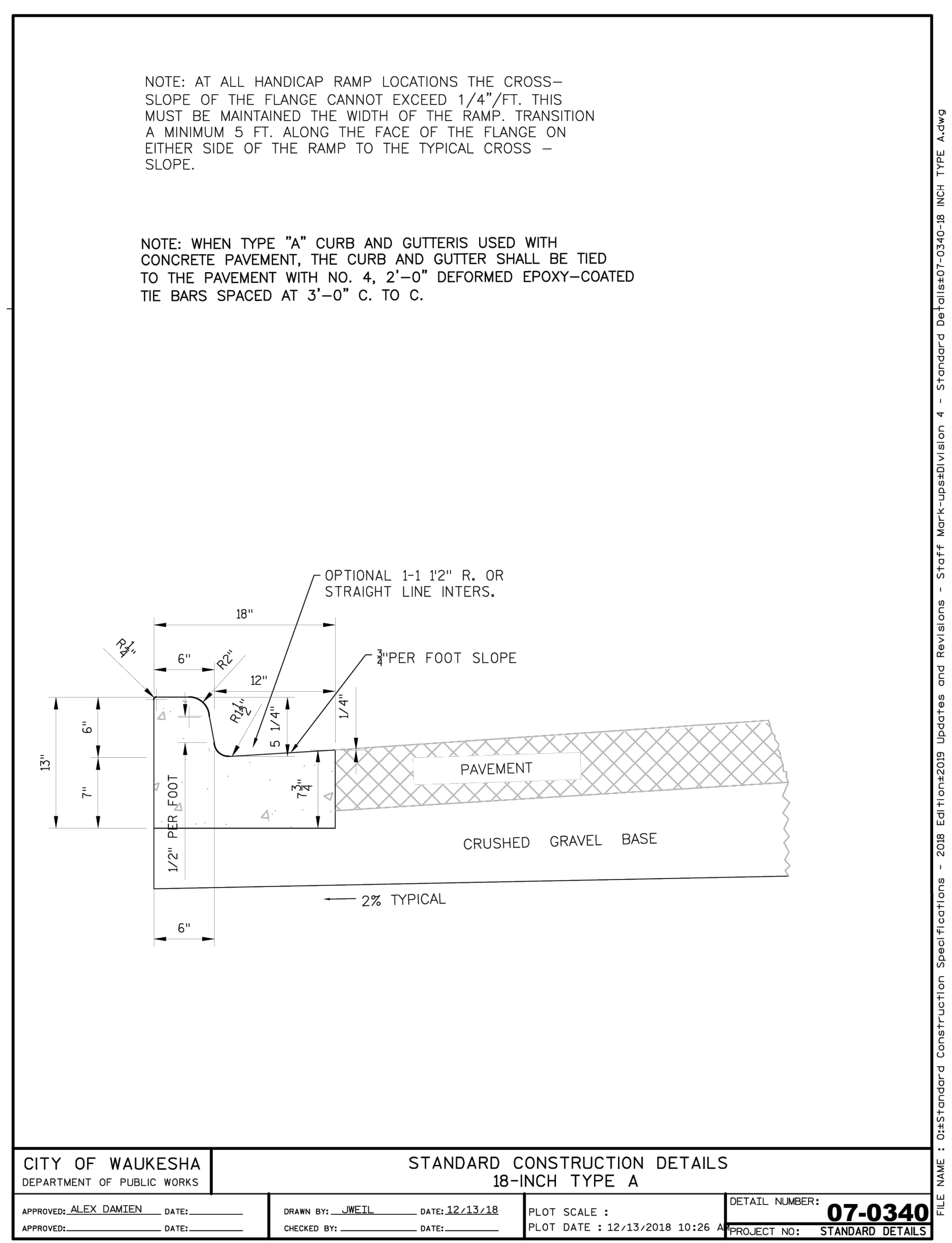
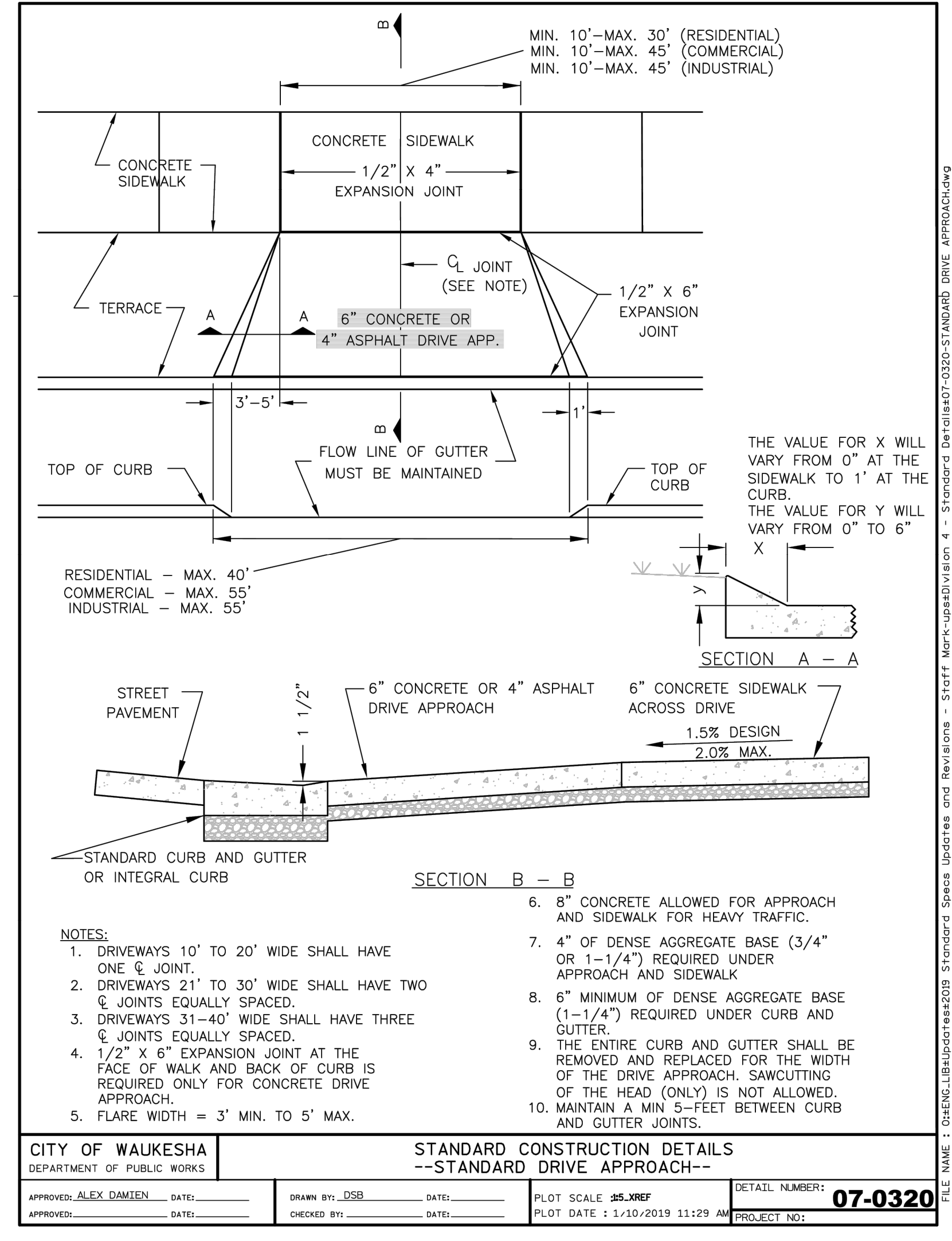
Drawing Title

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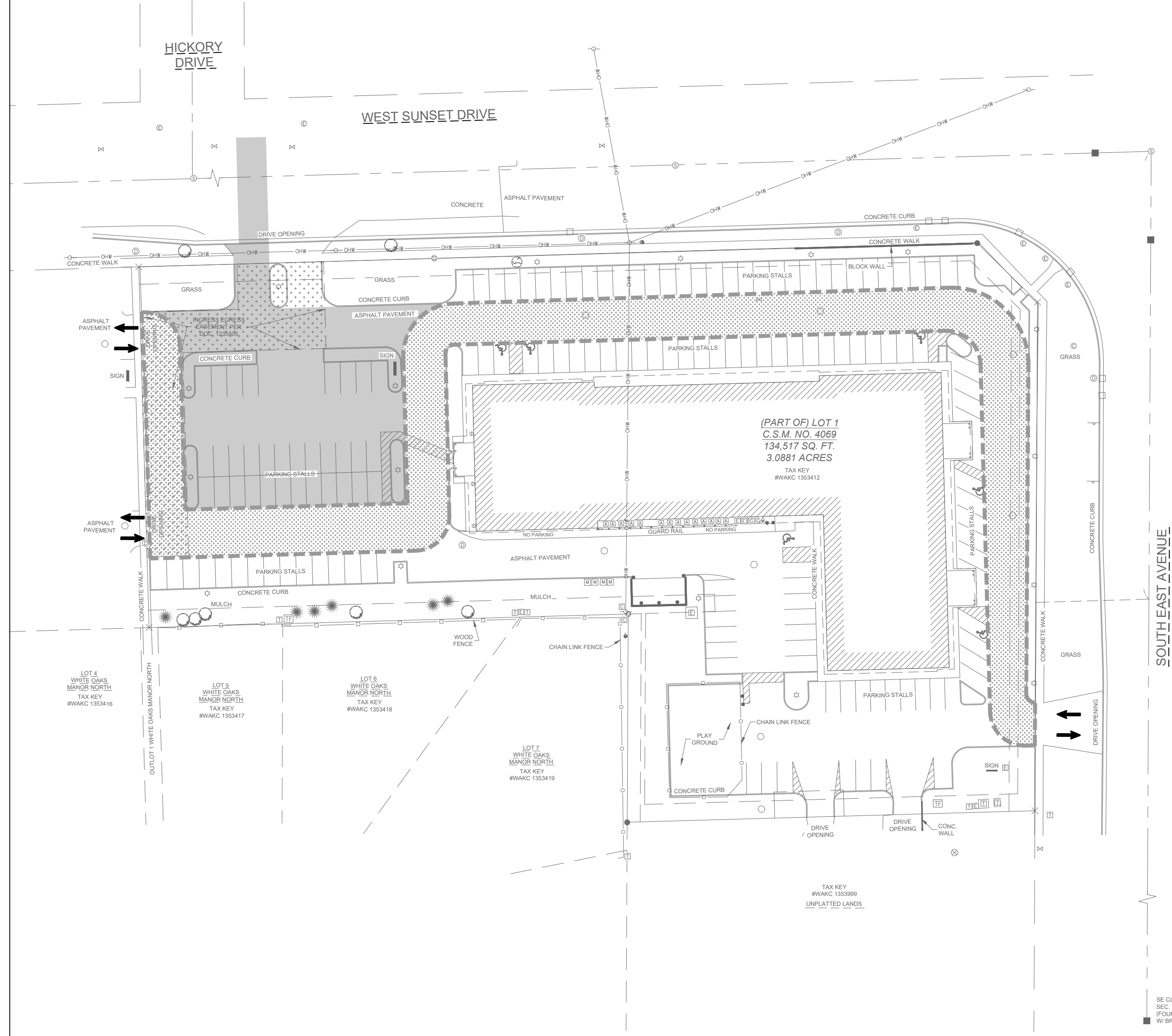
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CONSTRUCTION DETAILS  
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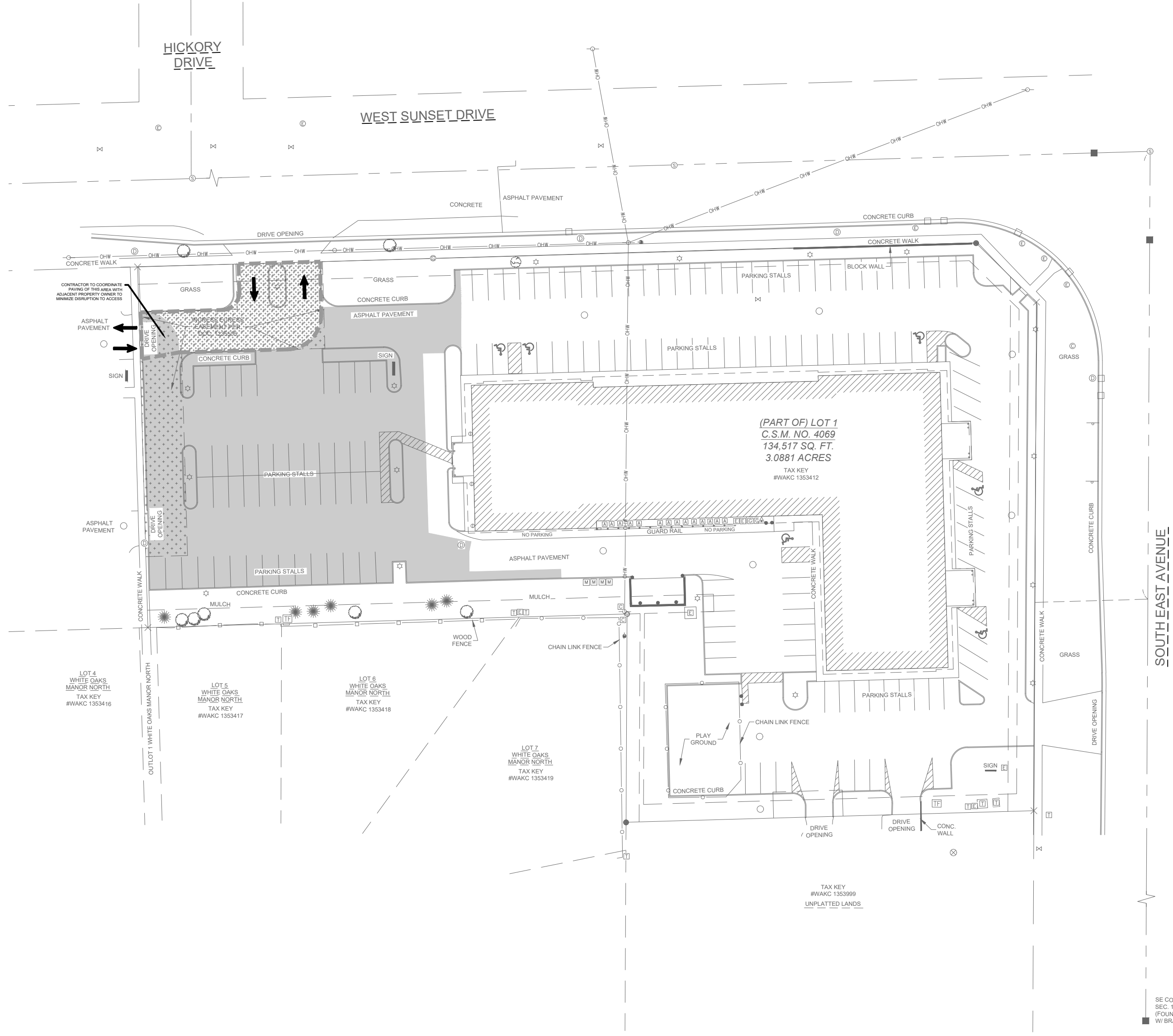
### PHASE 1

ACCESS TO NEIGHBORING BUSINESSES FROM S. EAST AVENUE. CONTRACTOR SHALL NOTIFY BUSINESSES PRIOR TO CHANGES IN SITE ACCESS AND PROVIDE BARRICADES AND/OR FENCING AS NECESSARY TO PREVENT TRAFFIC FROM ENTERING THE ACTIVE CONSTRUCTION ZONE.



### PHASE 2

ACCESS TO NEIGHBORING BUSINESS FROM NEWLY CONSTRUCTED W. SUNSET DRIVE ENTRANCE. CONTRACTOR SHALL NOTIFY BUSINESSES PRIOR TO CHANGES IN SITE ACCESS AND PROVIDE BARRICADES AND/OR FENCING AS NECESSARY TO PREVENT TRAFFIC FROM ENTERING THE ACTIVE CONSTRUCTION ZONE.



GRAPHICAL SCALE (FEET)  
0 1" = 50' 100'

LEGEND	
	AREA OF CONSTRUCTION
	ACCESS ROUTE

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SITE ACCESS SEQUENCING PLAN  
1" = 20'



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Project Manager: AEV  
Job Number: 24-092

#### Additional Info

Project Name

NEW BUILDING FOR:  
STARBUCKS  
101 SUNSET DR.  
WAUKESHA, WI 53186

#### Dates/Revisions

01/24/2025 FINAL PLAN COMMISSION	1
02/17/2025 PERMIT SET	2

#### Drawing Title

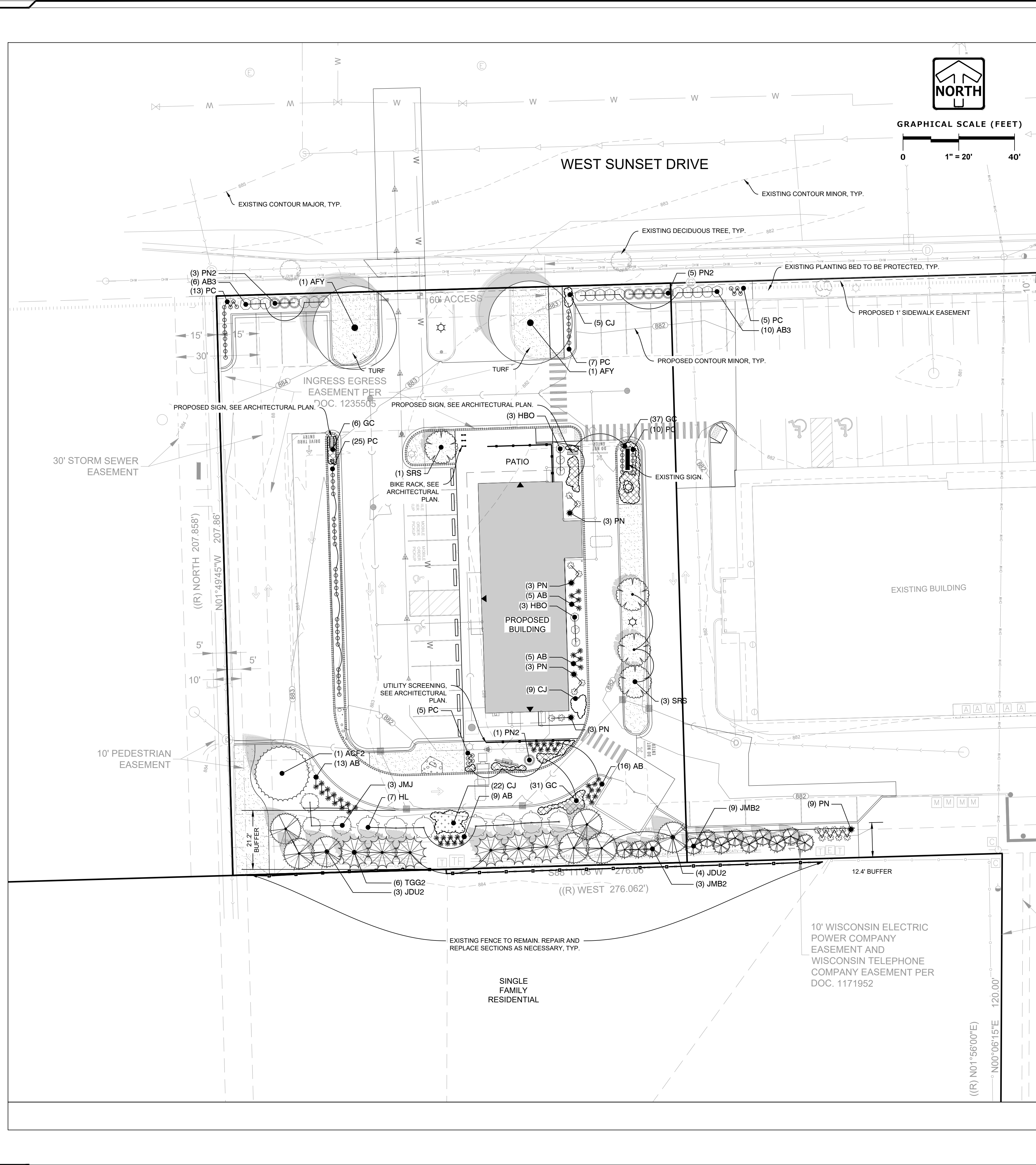
SITE ACCESS  
SEQUENCING PLAN

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PLOT DATE: 2/17/2025

FILE NAME: Z:\PROJECTS\2024\6075-00-WAUCAD\SHEETS\6075-00-LANDSCAPE-PLAN.DWG



PLANT SCHEDULE

SYMBOL	CODE	QTY	BOTANICAL NAME	COMMON NAME	SIZE	REMARKS
<b>TREES</b>						
	AFY	2	Acer x freemanii 'Autumn Fantasy'	Autumn Fantasy Maple	2' Cal.	50' T x 40' W
	SRS	4	Syringa reticulata 'Summer Storm'	Summer Storm Tree Lilac	2' Cal.	17' T x 12' W
<b>EVERGREEN TREES</b>						
	ACF2	1	Abies concolor	White Fir	6' Ht.	40' T x 25' W
	JMB2	12	Juniperus chinensis 'Mountbatten'	Mountbatten Juniper	6' Ht.	15' T x 7' W
	JDU2	7	Juniperus virginiana 'Hilli'	Hills Dundee Juniper	6' Ht.	45' T x 14' W
	TGG2	6	Thuja occidentalis 'Green Giant'	Green Giant Arborvitae	6' Ht.	50' T x 15' W
<b>DECIDUOUS SHRUBS</b>						
	AB3	16	Aronia melanocarpa 'UCONNAM166'	Low Scape Hedger® Black Chokeberry	2' Ht.	4' T x 4' W
	HBO	6	Hydrangea paniculata 'Bobo'	Bobo Hydrangea	1 gal.	3' T x 3' W
	HL	7	Hydrangea paniculata 'Limelight'	Limelight Panicle Hydrangea	4' Ht.	8' T x 8' W
<b>EVERGREEN SHRUBS</b>						
	JMJ	3	Juniperus chinensis 'Mint Julep'	Mint Julep Juniper	2' W	6' T x 7' W
	PN2	9	Picea abies 'Nidiformis'	Nest Spruce	1.5' W	3' T x 4' W
<b>ORNAMENTAL GRASSES</b>						
	AB	50	Andropogon gerardii 'Blackhawks'	Blackhawks Big Bluestem	1 gal.	4' T x 2' W
	PC	65	Panicum virgatum 'Cheyenne Sky'	Cheyenne Sky Prairie Winds® Switch Grass	1 gal.	30" T X 18" W
	PN	21	Panicum virgatum 'Northwind'	Northwind Switch Grass	1 gal.	5' T x 2' W
<b>PERENNIALS</b>						
	CJ	36	Coreopsis x 'Jethro Tull'	Jethro Tull Tickseed	1 gal.	24" o.c.
	GC	74	Geranium cinereum 'Ballerina'	Ballerina Hardy Geranium	1 gal.	24" o.c.
<b>GROUND COVERS</b>						
		2,350 sf	DROUGHT TOLERANT HYDROSEED			
		87 sf	DECORATIVE STONE MULCH			

LANDSCAPE IMPROVEMENT TABLE	REQUIRED	PROVIDED
<b>BUFFER YARD REQUIREMENT</b> • BUSINESS DISTRICT TO SINGLE FAMILY RESIDENTIAL	20' BUFFER	21' BUFFER
<b>PARKING LOT SCREENING</b> • ADJACENT TO ROW AND SINGLE FAMILY	• 2' BERM • 3' FENCE • HEDGE	HEDGE

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CHICAGO | MILWAUKEE | NATIONWIDE  
 PEG JOB #: 6075-00-WI

OVERALL LANDSCAPE PLAN  
1" = 20'

LogicDA.com | 414.909.0080  
 Project Manager: AEV  
 Job Number: 24-092

Additional Info

Project Name

**NEW BUILDING FOR:  
STARBUCKS**

101 SUNSET DR.  
WAUKESHA, WI 53186

Dates/Revisions

02/17/2025  
 PERMIT SET

Drawing Title  
 OVERALL LANDSCAPE PLAN

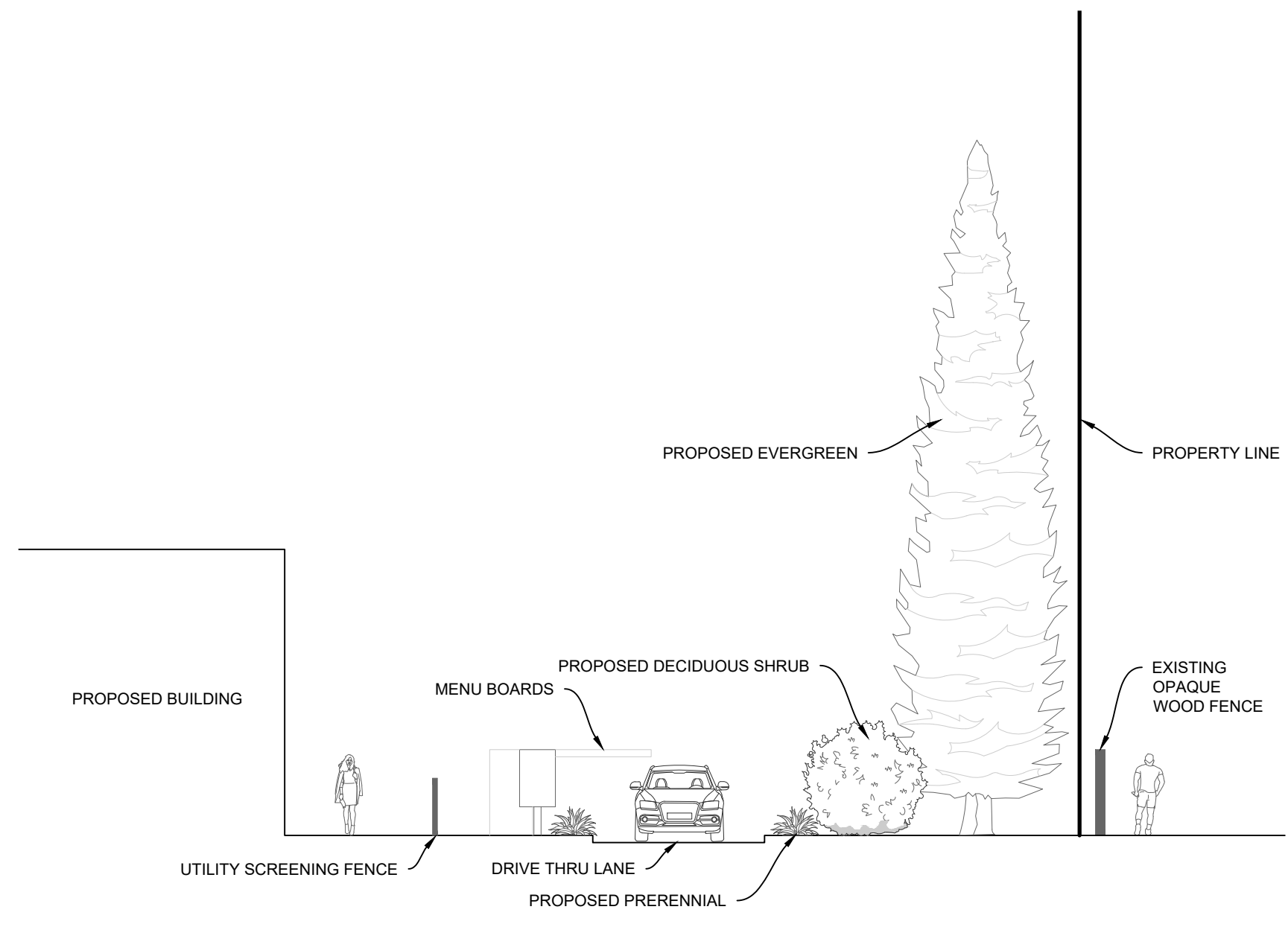
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COLOR LANDSCAPE PLAN LEGEND

- PLANTING BEDS
- TURF
- DECORATIVE STONE MULCH



LANDSCAPE CROSS SECTION 1  
SCALE: 1"=10'

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**DA**  
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COLOR LANDSCAPE PLAN

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GENERAL PLANTING NOTES

- THE LAYOUT OF ALL PLANTING BEDS AND INDIVIDUAL TREES AND SHRUBS SHALL BE STAKED BY THE CONTRACTOR IN ADVANCE OF INSTALLATION. FLAGGING, STAKES, OR PAINT MAY BE USED TO DELINEATE LOCATIONS AS SCALED FROM THE PLANS. AN APPROVED REPRESENTATIVE WILL REVIEW THESE LOCATIONS WITH THE CONTRACTOR AND MAKE MINOR ADJUSTMENTS AS NECESSARY. BED LAYOUT SHALL ALSO INCLUDE PERENNIAL GROUPINGS BY SPECIES.
- THE CONTRACTOR IS RESPONSIBLE FOR INDEPENDENTLY DETERMINING THE PLANT MATERIAL QUANTITIES REQUIRED BY THE LANDSCAPE PLANS. REPORT ANY DISCREPANCIES TO THE LANDSCAPE ARCHITECT.
- NO PLANT MATERIAL OR PLANT SIZE SUBSTITUTIONS WILL BE ACCEPTED WITHOUT APPROVAL BY THE LANDSCAPE ARCHITECT. ANY CHANGES SHALL BE SUBMITTED TO THE LANDSCAPE ARCHITECT IN WRITING PRIOR TO INSTALLATION.
- ALL BNB STOCK SHALL BE NURSERY GROWN IN A CLAY LOAM SOIL FOR A MINIMUM OF THREE GROWING SEASONS WITHIN 200 MILES OF PROJECT LOCATION, IN A ZONE COMPATIBLE WITH USDA HARDINESS ZONE 5A. SEED SHALL BE PROVIDED FROM A NURSERY (WITHIN 200 MILES) WITH A SIMILAR PLANT HARDINESS ZONE AS PROJECT LOCATION. EXISTING SOIL SHALL BE AMENDED PER SOIL ANALYSIS REPORT TO ENSURE A PROPER GROWING MEDIUM IS ACHIEVED.
- ALL PLANT MATERIAL SHALL COMPLY WITH STANDARDS DESCRIBED IN AMERICAN STANDARD OF NURSERY STOCK - Z60.1 ANSI. LANDSCAPE ARCHITECT OR OWNERS AUTHORIZED REPRESENTATIVE RESERVES THE RIGHT TO INSPECT AND POTENTIALLY REJECT ANY PLANT MATERIAL DEEMED TO NOT MEET THE REQUIRED STANDARDS.
- ALL STOCK SHALL BE FREE OF DISEASES AND HARMFUL INSECTS, DAMAGE, DISORDERS AND DEFORMITIES.
- TREES SHALL HAVE SINGLE, STRAIGHT TRUNKS AND WELL BALANCED BRANCH SYSTEMS. MULTI-STEM TREES SHALL HAVE 3-4 STRAIGHT TRUNKS AND WELL BALANCED BRANCH SYSTEMS. HEIGHT-TO-CALIPER RATIOS SHALL BE CONSISTENT WITH THE LATEST EDITION OF ANSI Z60.1.
- ROOT SYSTEMS SHALL BE LARGE ENOUGH TO ALLOW FOR FULL RECOVERY OF THE TREE, AND SHALL CONFORM TO STANDARDS AS THEY APPEAR IN THE MOST CURRENT REVISION OF THE AMERICAN ASSOCIATION OF NURSEYMEN'S AMERICAN STANDARD OF NURSERY STOCK ANSI Z60.1.
- BNB TREES SHALL BE DUG WITH A BALL OF SOIL, NOT SOFT BALLED OR POTTED AND SHALL BE FIRM IN THEIR ROOTBALL. ROOT BALL SHALL BE WRAPPED (WITH BIODEGRADABLE MATERIAL). THE TREE ROOT FLARE, OR COLLAR, SHALL BE AT OR WITHIN THE TOP THREE INCHES OF GRADE.
- ALL SPRING TREES MUST BE FRESHLY DUG IN THE MOST RECENT SPRING.
- ALL AUTUMN TREES MUST BE FRESHLY DUG IN THE MOST RECENT AUTUMN.
- TREES SHALL BE ALIVE, HEALTHY AND APPROPRIATELY MOIST, AT TIME OF DELIVERY. TREES SHALL BE SUBJECT TO INSPECTION FOR CONFORMITY TO SPECIFICATION REQUIREMENTS AND APPROVAL BY THE LANDSCAPE ARCHITECT OR OWNERS REPRESENTATIVE. THE LANDSCAPE ARCHITECT OR OWNERS REPRESENTATIVE RESERVES THE RIGHT TO REJECT ANY TREES THAT DO NOT MEET THE SPECIFICATIONS OR THAT HAVE BEEN DAMAGED DURING SHIPMENT. THE LANDSCAPE INSTALLER MUST RECEIVE APPROVAL FROM LANDSCAPE ARCHITECT FOR ANY SUBSTITUTIONS OR ALTERATIONS.
- ALL PLANT MATERIAL SHALL BE INSTALLED IN ACCORDANCE WITH PLANTING DETAILS.
- ALL PLANTING BEDS SHALL HAVE A MINIMUM 10" DEPTH OF PREPARED SOIL. WITH APPROVAL, EXISTING SOIL MAY BE UTILIZED PROVIDED THE PROPER SOIL AMENDMENTS ARE TILLED THOROUGHLY INTO THE TOP 10" OF SOIL. REFER TO SOIL PLACEMENT NOTES.
- WHILE PLANTING TREES AND SHRUBS, BACKFILL 2/3 OF PLANTING HOLE AND WATER TREE THOROUGHLY BEFORE INSTALLING THE REMAINDER OF SOIL MIXTURE. AFTER ALL SOIL HAS BEEN PLACED INTO THE PLANTING HOLE WATER THOROUGHLY AGAIN.
- THE CONTRACTOR MUST LABEL ALL TREES WITH THE COMMON AND BOTANICAL NAMES PRIOR TO FINAL INSPECTION.
- ALL PLANTING BEDS (EXCEPT AREAS CALLED OUT AS STONE MULCH) SHALL BE MULCHED WITH 3" DEEP SHREDDED HARDWOOD MULCH, AND ALL TREES PLANTED IN TURF AREAS SHALL RECEIVE A 3" DEEP SHREDDED HARDWOOD MULCHED RING AS SHOWN IN PLANTING DETAILS.
- ALL PLANTING BEDS AND TREE RINGS (EXCEPT AREAS CALLED OUT AS STONE MULCH) SHALL HAVE A 4" DEEP TRENCHED BED EDGE CREATED BY EITHER A FLAT LANDSCAPE SPADE OR MECHANICAL EDGER. BED EDGES ARE TO BE CUT CLEAN AND SMOOTH AS SHOWN ON LANDSCAPE PLANS WITH A CLEAN DEFINITION BETWEEN TURF AND PLANTING AREAS.
- ALL AREAS RECEIVING STONE MULCH TO RECEIVE STEEL BED EDGING. CONTRACTOR TO PROVIDE STEEL EDGING SPECIFICATION FOR APPROVAL PRIOR TO INSTALLATION. STEEL EDGING TO BE INSTALLED PER MANUFACTURERS RECOMMENDATION. (REFER TO 6/L-3 & 7/L-3)
- AREAS THAT CALL FOR STONE MULCH SHALL RECEIVE LANDSCAPE FABRIC WITH 3" DEEP AMERICAN HERITAGE STONE MULCH. REFER TO STONE MULCH DETAILS. CONTRACTOR TO PROVIDE LANDSCAPE FABRIC AND MULCH SPECIFICATIONS TO LANDSCAPE ARCHITECT FOR APPROVAL PRIOR TO INSTALLATION. LANDSCAPE FABRIC SHALL BE INSTALLED TO COVER THE ENTIRE AREA TO RECEIVE STONE MULCH WITH EACH SEAM OVERLAPPING A MINIMUM OF 6".

- ALL TURF SEED AREAS SHALL RECEIVE A MINIMUM OF 6" DEPTH OF TOPSOIL. WITH APPROVAL, EXISTING SOIL MAY BE UTILIZED PROVIDED THE PROPER SOIL AMENDMENTS ARE TILLED THOROUGHLY INTO THE TOP 6" OF SOIL AS INDICATED IN THE SOIL PLACEMENT NOTES. REQUIRED AMENDMENTS SHALL BE DETERMINED BASED ON A SOIL ANALYSIS TO BE PERFORMED. ALL TOPSOIL AMENDMENT SHALL BE AGED WEED FREE MANURE OR CLASS 1 ORGANIC MATTER.
- FOR LAWN SEEDING, APPLY A STARTER FERTILIZER AND SEED UNIFORMLY AT THE RATE RECOMMENDED BY MANUFACTURER, AND PROVIDE A MULCH COVERING THAT IS SUITABLE TO PROMOTE SEED GERMINATION AND TURF ESTABLISHMENT. CONTRACTOR TO PROVIDE FERTILIZER, SEED, AND MULCH SPECIFICATIONS TO THE LANDSCAPE ARCHITECT FOR APPROVAL PRIOR TO INSTALLATION. EROSION CONTROL MEASURES ARE TO BE INSTALLED IN THOSE AREAS REQUIRING STABILIZATION (SWALES, SLOPES EXCEEDING 1:3, AND THOSE LOCATIONS INDICATED IN CIVIL DRAWINGS).
- THE CONTRACTOR TO ENSURE A SMOOTH, UNIFORM QUALITY TURF IS ACHIEVED WITH NO BARE SPOTS LARGER THAN 6" X 6". ANY BARE SPOTS LARGER THAN 6" X 6" AT THE END OF ESTABLISHMENT PERIOD SHALL BE RESEED AT THE CONTRACTORS EXPENSE TO OBTAIN A DENSE, UNIFORM LAWN.
- ALL FINISH GRADING AND LAWN AREAS TO BE INSTALLED BY LANDSCAPE CONTRACTOR.
- ALL DISTURBED AREAS WITHIN THE PROJECT SHALL BE RESTORED TO ORIGINAL OR BETTER CONDITION.
- ALL DISTURBED AREAS OUTSIDE THE LIMITS OF WORK SHALL BE RESTORED TO ORIGINAL OR BETTER CONDITION AT NO ADDITIONAL COST TO THE OWNER.
- THE CONTRACTOR SHALL VERIFY ALL EXISTING UTILITIES, INCLUDING ANY IRRIGATION LINES, PRIOR TO DIGGING. CONSULT DIGGERS HOTLINE.
- TREES SHALL BE INSTALLED NO CLOSER THAN:
  - 10 FEET FROM ANY FIRE HYDRANT
  - 7 FEET FROM STORM SEWER, SANITARY SEWER LATERALS, DRIVEWAYS, AND WATER SERVICE
- THE CONTRACTOR SHALL ENSURE THAT SOIL CONDITIONS AND COMPACTION ARE ADEQUATE TO ALLOW FOR PROPER DRAINAGE AROUND THE CONSTRUCTION SITE. UNDESIRABLE CONDITIONS SHALL BE BROUGHT TO THE ATTENTION OF THE LANDSCAPE ARCHITECT PRIOR TO BEGINNING OF WORK. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO ENSURE PROPER SURFACE AND SUBSURFACE DRAINAGE IN ALL AREAS
- THE CONTRACTOR IS RESPONSIBLE FOR ALL PERMITS, FEES, AND LICENSES NECESSARY FOR THE INSTALLATION OF THIS PLAN.
- THE CONTRACTOR IS TO REVIEW ALL SITE ENGINEERING DOCUMENTS PRIOR TO INSTALLATION. ANY CONFLICTS MUST BE REPORTED TO THE LANDSCAPE ARCHITECT. THESE LANDSCAPE DRAWINGS ARE FOR THE INSTALLATION OF PLANT MATERIALS ONLY UNLESS OTHERWISE STATED.
- THE CONTRACTOR SHALL PROVIDE WATERING AND MAINTENANCE SERVICES FOR A PERIOD OF 60 DAYS TO ENSURE VEGETATIVE ESTABLISHMENT. UPON COMPLETION OF THE PROJECT, CONTRACTOR SHALL SUPPLY THE OWNER IN WRITING WITH ONGOING WATERING AND MAINTENANCE INSTRUCTIONS.
- PLANT MATERIALS SHALL BE GUARANTEED FOR A PERIOD OF ONE (1) YEAR FROM TIME OF OWNER ACCEPTANCE. ONLY ONE REPLACEMENT PER PLANT WILL BE REQUIRED DURING THE WARRANTY PERIOD EXCEPT IN THE EVENT OF FAILURE TO COMPLY WITH THE SPECIFIED REQUIREMENTS.
- THE CONTRACTOR IS RESPONSIBLE TO CONDUCT A FINAL WALK THROUGH WITH THE LANDSCAPE ARCHITECT AND OR OWNERS REPRESENTATIVE TO ANSWER QUESTIONS, PROVIDE INSTRUCTIONS, AND ENSURE THAT PROJECT REQUIREMENTS HAVE BEEN MET.

SOIL PLACEMENT NOTES

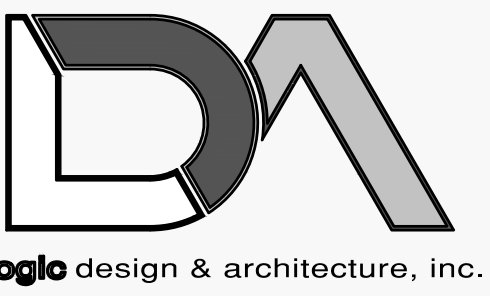
- LOOSEN SUBGRADE TO A MINIMUM DEPTH INDICATED IN PLANTING NOTES USING A CULTI-MULCHER OR SIMILAR EQUIPMENT, AND REMOVE STONES MEASURING OVER 1-1/2 INCHES IN ANY DIMENSION, STICKS, RUBBISH AND OTHER EXTRANEEOUS MATTER. AREAS ADJACENT TO WALKS AND PAVEMENT SHALL BE FREE OF EXCESS STONE AND PAVING MATERIALS SO AS TO PROVIDE AN UNINTERRUPTED CROSS SECTION OF SOIL. INTERNAL PARKING ISLANDS SHALL BE LOOSENED TO A DEPTH OF 30".
- THOROUGHLY BLEND PLANTING SOIL MIX FOR PLANTING BED AREAS. (1 PART EXISTING SOIL, 1 PART TOPSOIL, 1 PART ORGANIC SOIL AMENDMENT, 2.9 POUNDS PER CUBIC YARD OF 4-4-4 ANALYSIS SLOW-RELEASE FERTILIZER)
- TREE AND SHRUB HOLES SHALL BE FILLED WITH A PREPARED PLANTING MIXTURE OF 1 PART TOPSOIL, 2 PARTS PLANTING SOIL MIX.
- SPREAD SOIL AND SOIL AMENDMENTS TO DEPTH INDICATED ON DRAWINGS, BUT NOT LESS THAN REQUIRED TO MEET FINISH GRADES AFTER NATURAL SETTLEMENT. (FINISH GRADE OF PLANTING BEDS SHALL BE 3" BELOW ALL ADJACENT SURFACES. FINISH GRADE OF TURF SEEDING AREAS SHALL BE 1" BELOW ALL ADJACENT HARD SURFACES, WALKS, AND CURBS.)
- PLACE APPROXIMATELY 1/2 OF TOTAL AMOUNT OF SOIL REQUIRED. WORK INTO TOP OF LOOSENED SUBGRADE TO CREATE A TRANSITION LAYER, THEN PLACE REMAINDER OF THE SOIL. SOIL TRANSITION LAYER SHALL BE TILLED TO A MINIMUM DEPTH OF 6" BELOW THE DEPTH OF NEWLY PLACED SOIL. PARKING LOT ISLANDS SHALL BE CROWNED TO A HEIGHT OF 6" TO PROVIDE PROPER DRAINAGE UNLESS OTHERWISE NOTED.
- DO NOT SPREAD IF PLANTING SOIL OR SUBGRADE IS FROZEN, MUDDY, OR EXCESSIVELY WET.
- FINISH GRADING: GRADE SOIL TO A SMOOTH, UNIFORM SURFACE PLANE WITH A LOOSE, UNIFORMLY FINE TEXTURE.
- ROLL AND RAKE, REMOVE RIDGES, AND FILL DEPRESSIONS TO MEET FINISH GRADES.
- RESTORE PLANTING BEDS IF ERODED OR OTHERWISE DISTURBED AFTER FINISH GRADING AND BEFORE PLANTING.

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LANDSCAPE GENERAL NOTES  
N.T.S.



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Project Manager: AEV  
Job Number: 24-092

Additional Info

NEW BUILDING FOR:  
STARBUCKS

Project Name

101 SUNSET DR.  
WAUKESHA, WI 53186

Dates/Revisions

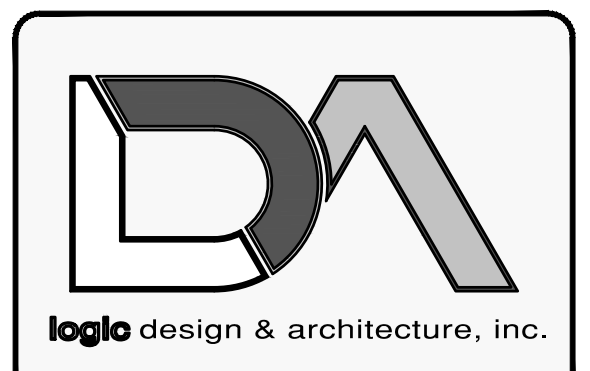
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L-2

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Additional Info

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**STARBUCKS**  
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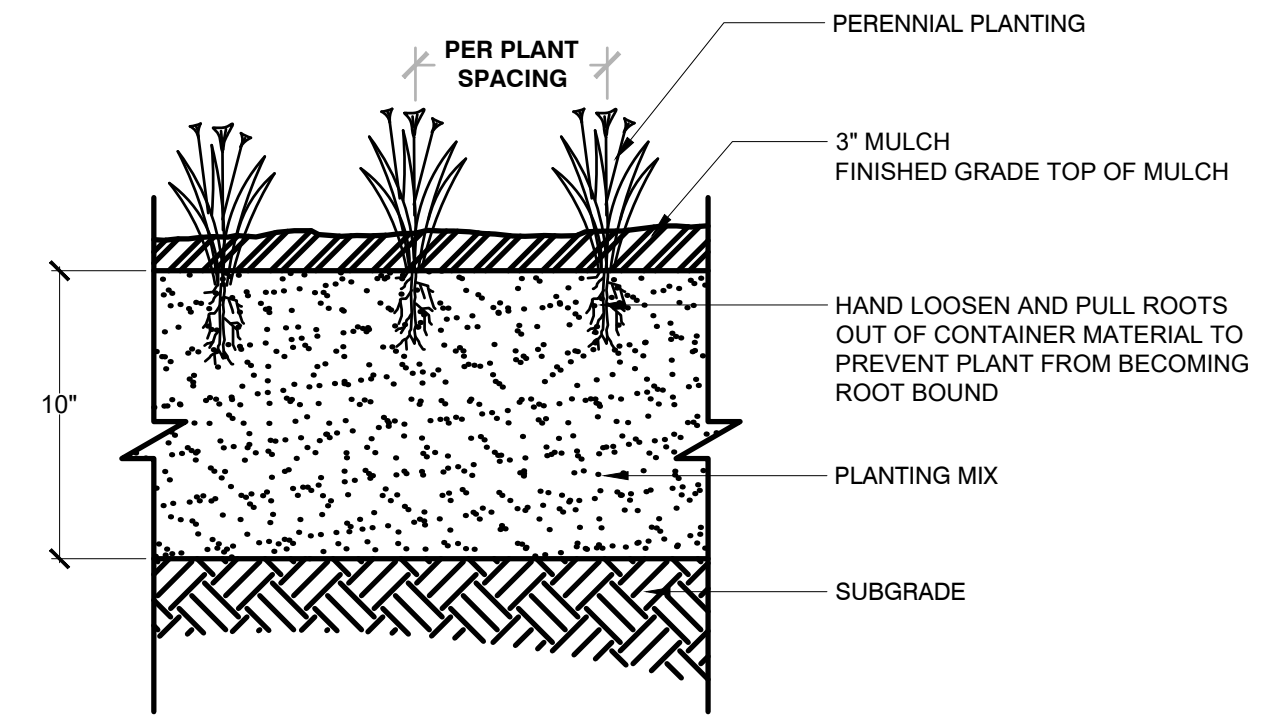
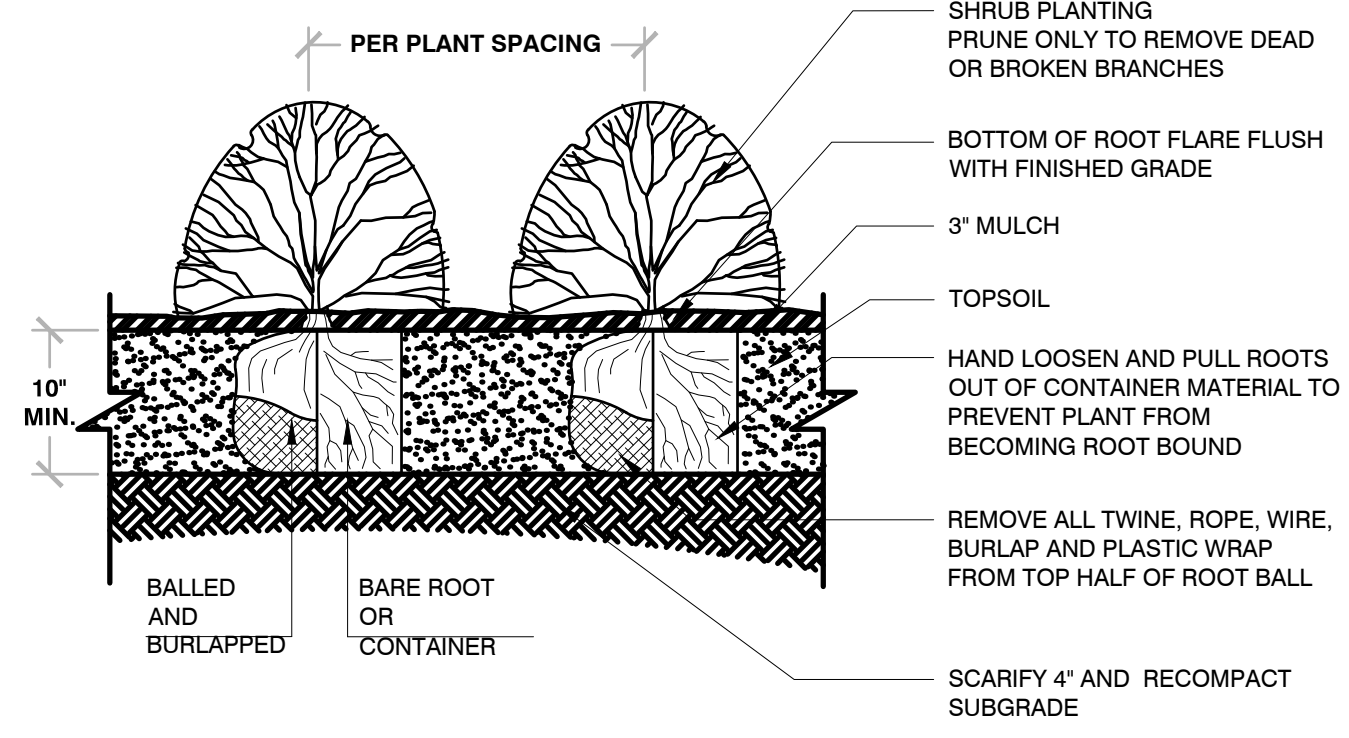
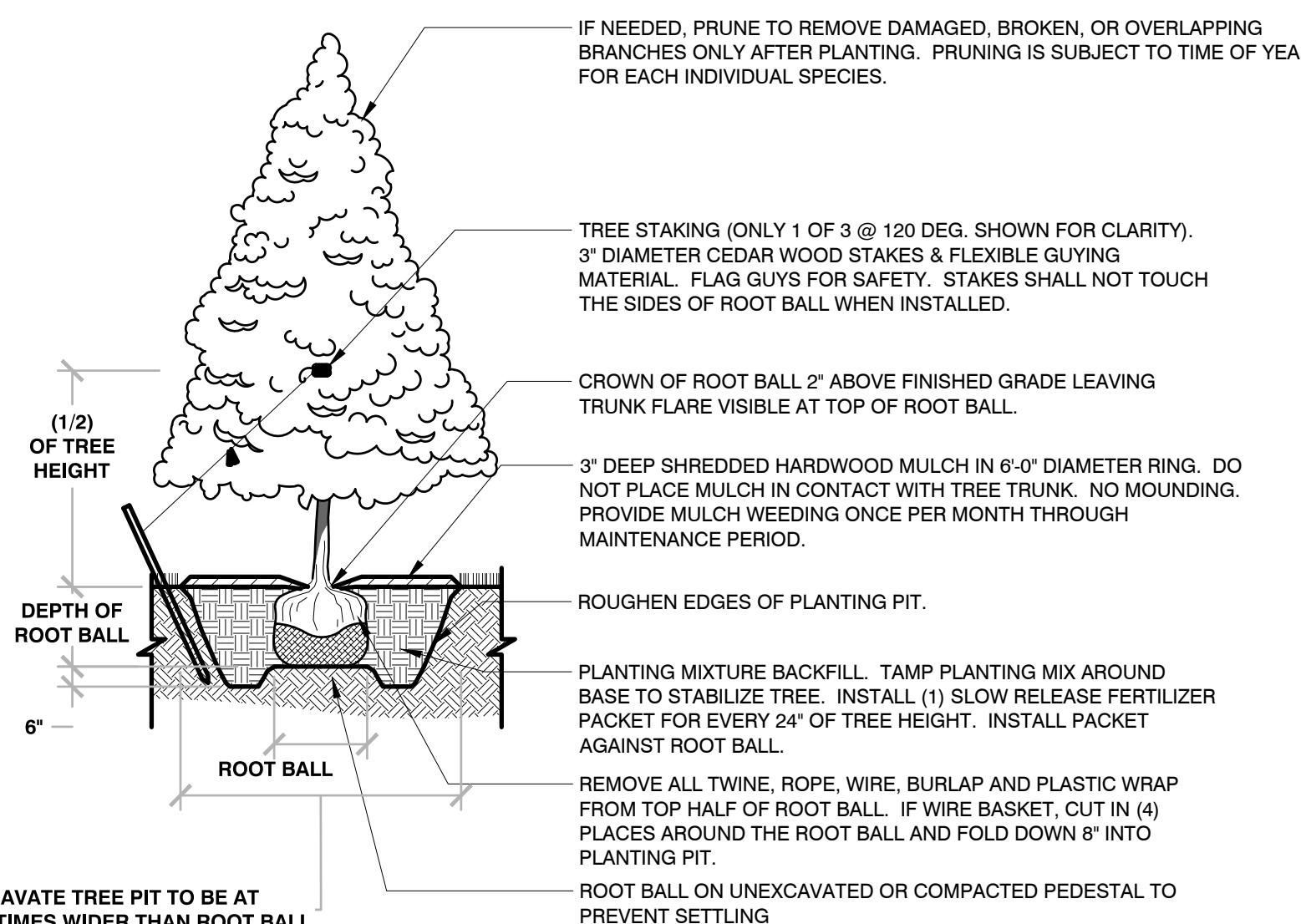
LANDSCAPE DETAILS

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- BAREROOT PLANTING NOTES:**
1. SOAK ROOTS IN WATER FOR AT LEAST ONE HOUR BUT NOT MORE THAN 24 HOURS PRIOR TO PLANTING.
  2. SCARIFY SIDES AND BOTTOMS OF HOLE.
  3. PROCEED WITH CORRECTIVE PRUNING OF THE TOP AND BOTTOM ROOTS.
  4. TRANSFER PLANT DIRECTLY FROM WATER TO HOLE. SET PLANT SO THE ROOT FLARE IS APPROXIMATELY AT THE FINISHED SOIL ELEVATION. SPREAD ROOTS OUT EVENLY. PLUMB AND IMMEDIATELY BACKFILL WITH PLANTING SOIL MIX.
  5. WATER THOROUGHLY WITHIN 2 HOURS TO SETTLE PLANTS AND FILL VOIDS.
  6. BACKFILL VOIDS AND WATER SECOND TIME.
  7. PLACE MULCH WITHIN 48 HOURS OF THE SECOND WATERING UNLESS SOIL MOISTURE IS EXCESSIVE.

**1 EVERGREEN TREE PLANTING**

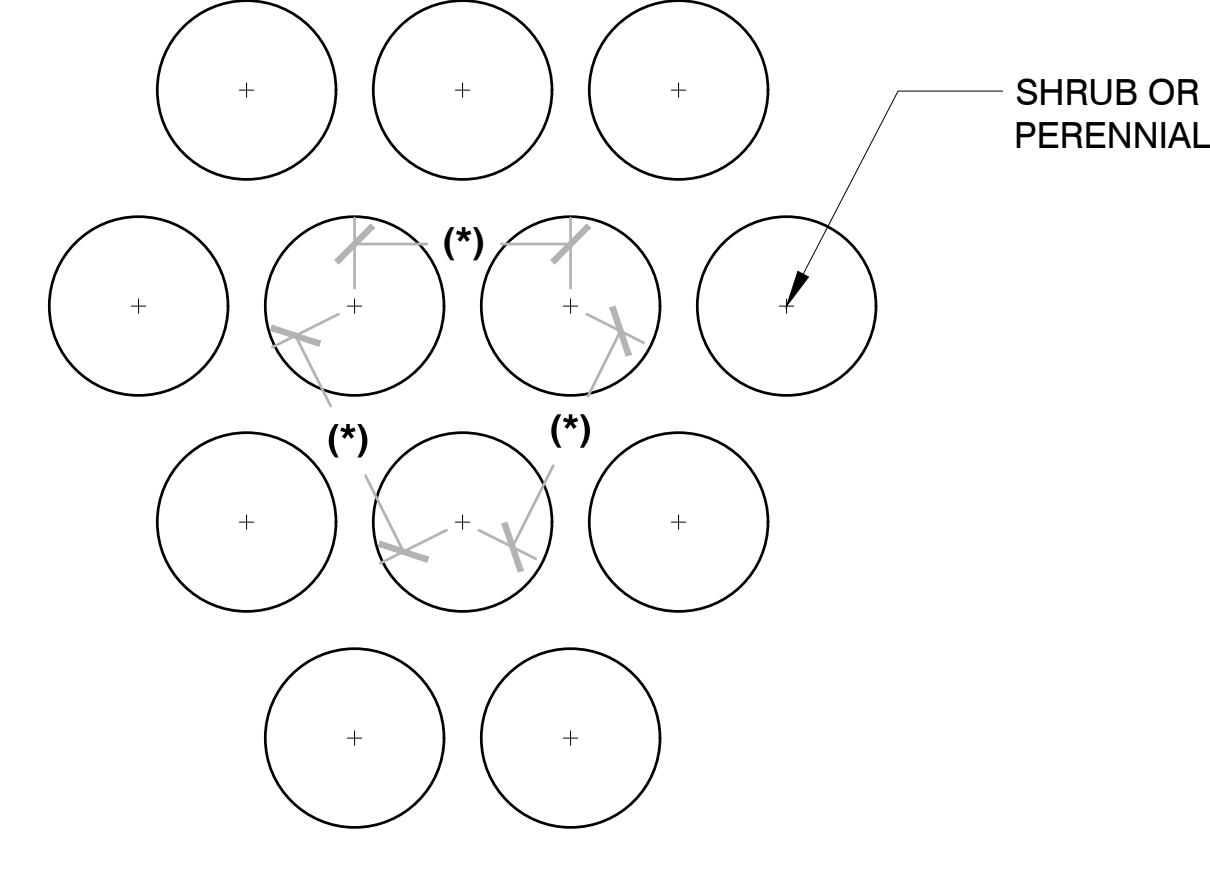
1/4" = 1'-0" 3293-03

**2 SHRUB PLANTING**

1/2" = 1'-0" 3293-02

**3 PERENNIAL PLANTING**

1" = 1'-0" 3293-01



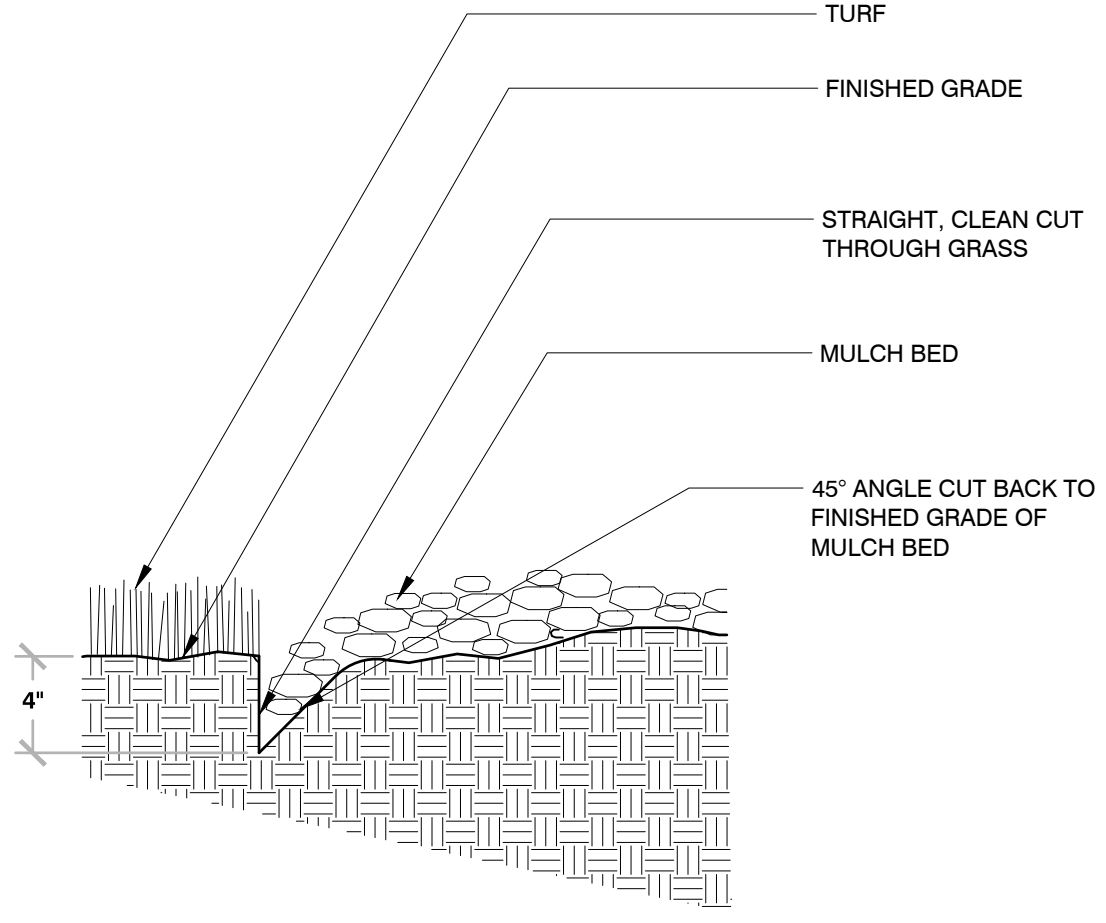
(\* ) = SPECIFIED PLANT SPACING PER PLANTING LIST

**4 PLANT SPACING**

3/4" = 1'-0" 3293-02

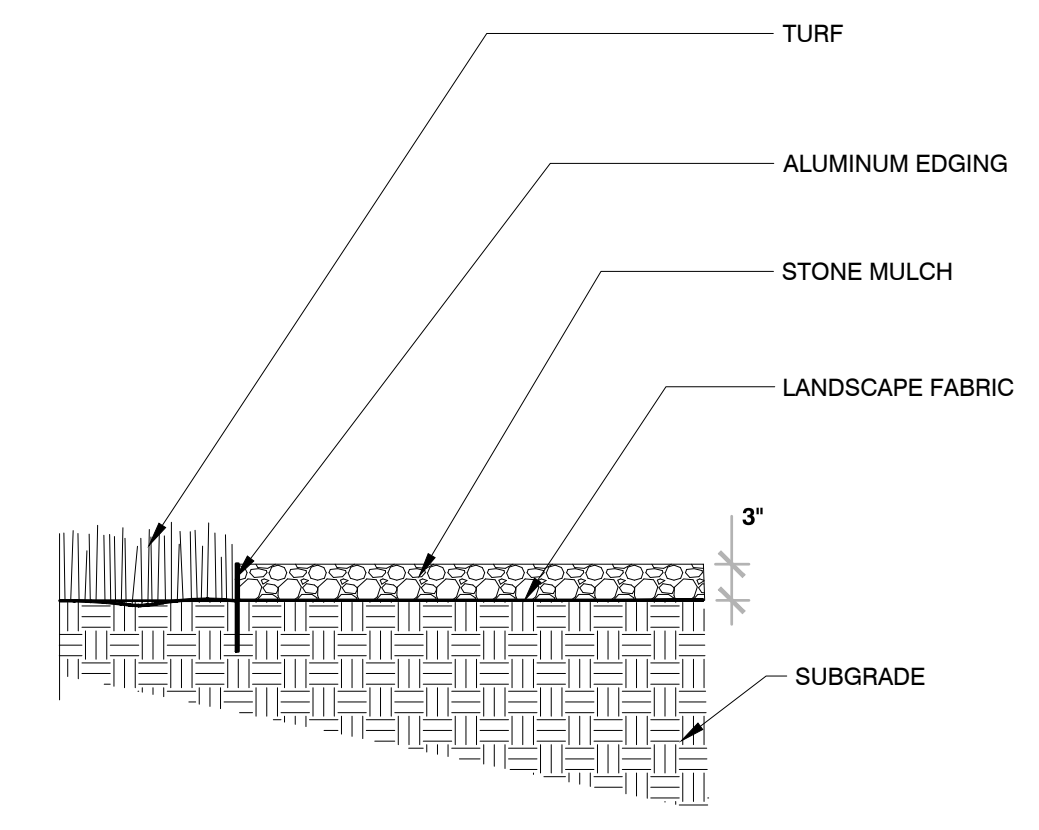
**5 TRENCHED BED EDGE**

3/4" = 1'-0" 3293-03



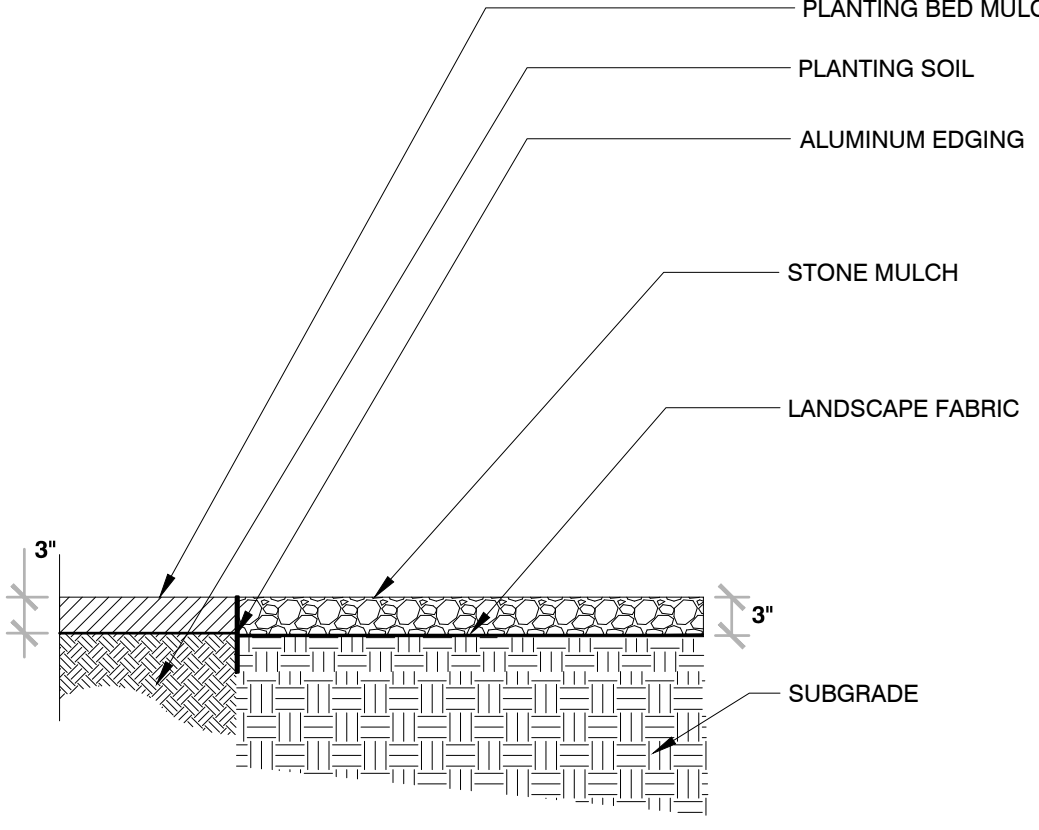
**6 STONE MULCH ALONG TURF**

3/4" = 1'-0" 329413-04



**7 STONE MULCH ALONG PLANTING BED**

3/4" = 1'-0" 329413-05



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